

# COATESVILLE VA MEDICAL CENTER

## RENOVATE BUILDING 69

1400 Black Horse Hill, Coatesville, PA

VA PROJECT NUMBER: 542-CSI-203

ISSUED FOR BID

03/29/2013

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AQUATIC CONSULTANT

ATLANTIC AQUATIC ENGINEERING

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### COVER SHEET LIST

Sheet Number	Sheet Name	10/05/12	12/05/12	12/12/12	01/22/13	02/05/13	03/29/13
GC001	COVER SHEET	X	X	X	X	X	X
GI001	GENERAL INFORMATION	X	X	X	X	X	X
GI002	ARCHITECTURAL SITE PLAN	X	X	X	X	X	X
GI003	FIRST FLOOR LIFE SAFETY PLAN	X	X	X	X	X	X
GI004	FUNCTION PLAN	X	X				
GI005	EXISTING FLOOR PLAN	X	X				
GI006	EXISTING EXTERIOR ELEVATIONS	X	X				
GI007	EXISTING ROOF PLAN	X	X				
GI008	EXISTING WALL SECTIONS	X	X				

### CIVIL SHEET LIST

Sheet Number	Sheet Name						
CS101	SITE PLAN			X	X	X	X
CS102	GRADING & UTILITY PLAN			X	X	X	X

### STRUCTURAL SHEET LIST

Sheet Number	Sheet Name						
S001	GENERAL NOTES				X	X	X
S111	FIRST FLOOR PLAN	X	X	X	X	X	X
S112	ROOF FRAMING PLAN	X	X				
S121	ROOF FRAMING PLAN			X	X	X	X
S201	DETAILS			X	X	X	X
S202	DETAILS			X	X	X	X
S203	DETAILS			X	X	X	X
S204	PATIENT LIFT DETAILS			X	X	X	X

### ARCHITECTURAL SHEET LIST

Sheet Number	Sheet Name	10/17/12	12/05/12	12/12/12	12/21/12	01/22/13	02/05/13	03/29/13
AD110	FIRST FLOOR DEMOLITION PLAN	X	X	X	X	X	X	X
AID-121	BLDG. 58 FIRST FLOOR DEMOLITION PLAN		X					
AE002	FIRST FLOOR PHASING, ICRA AND ALTERNATES PLAN		X	X	X	X	X	X
AE111	FIRST FLOOR ARCHITECTURAL AND DIMENSION PLAN	X	X	X	X	X	X	X
AE112	FIRST FLOOR REFLECTED CEILING PLAN	X	X	X	X	X	X	X
AE113	FIRST FLOOR FINISH PLAN	X	X	X	X	X	X	X
AE114	FIRST FLOOR - FLOOR PATTERN PLAN	X	X	X	X	X	X	X
AE116	FIRST FLOOR EQUIPMENT PLAN	X	X					

### ARCHITECTURAL SHEET LIST

Sheet Number	Sheet Name	10/17/12	12/05/12	12/12/12	12/21/12	01/22/13	02/05/13	03/29/13
AE121	ROOF PLAN	X	X	X	X	X	X	X
AE201	BUILDING SECTIONS AND ELEVATIONS	X	X	X	X	X	X	X
AE301	ENLARGED ELEVATIONS - THERAPY POOL			X	X	X	X	X
AE311	WALL SECTIONS			X	X	X	X	X
AE400	FIRST FLOOR ENLARGED PLAN - ADMINISTRATION			X	X	X	X	X
AE401	FIRST FLOOR ENLARGED PLAN - PROSTHETICS AND OCCUPATIONAL THERAPY CLINIC			X	X	X	X	X
AE402	FIRST FLOOR ENLARGED PLAN - MENTAL HEALTH OCCUPATIONAL THERAPY CLINIC			X	X	X	X	X
AE403	FIRST FLOOR ENLARGED PLAN - PHYSICAL AND KINESIOTHERAPY CLINICS			X	X	X	X	X
AE404	FIRST FLOOR ENLARGED PLAN - AUDIOLOGY			X	X	X	X	X
AE405	FIRST FLOOR ENLARGED PLAN - WEIGHT TRAINING CLINIC			X	X	X	X	X
AE406	FIRST FLOOR ENLARGED PLAN - THERAPY POOL			X	X	X	X	X
AE408	FIRST FLOOR ENLARGED PLAN - TOILET ROOMS			X	X	X	X	X
AE601	EXTERIOR AND ROOF DETAILS			X	X	X	X	X
AE611	FRAMING DETAILS			X	X	X	X	X
AE612	INTERIOR DETAILS			X	X	X	X	X
AE613	SHOWER DETAILS			X	X	X	X	X
AE621	PARTITION TYPES			X	X	X	X	X
AE623	DOOR AND BORROWED LIGHT DETAILS			X	X	X	X	X
AE632	CASEWORK DETAILS			X	X	X	X	X
AE701	SCHEDULES - DOOR/BORROWED LIGHT			X	X	X	X	X
AE702	SCHEDULES - TOILET ACCESSORY			X	X	X	X	X
AE704	SCHEDULES			X	X	X	X	X
AE705	SIGNAGE STANDARDS			X	X	X	X	X
AI-121	BLDG. 58 FIRST FLOOR ARCHITECTURAL AND FINISH PLAN			X	X			
AI-124	BLDG. 58 FIRST FLOOR REFLECTED CEILING PLAN			X	X			

### MECHANICAL SHEET LIST

Sheet Number	Sheet Name	10/17/12	12/05/12	12/12/12	12/21/12	01/22/13	02/05/13	03/29/13
M001	MECHANICAL NOTES, ABBREVIATIONS, AND LEGENDS	X	X	X	X	X	X	X
MD-101	BASEMENT MECHANICAL DEMOLITION PLAN	X	X	X				
MD101	BASEMENT TUNNELS, CRAWL SPACE MECHANICAL DEMOLITION PLAN				X	X	X	X
MD111	1ST FLOOR MECHANICAL DEMOLITION PLAN	X	X	X	X	X	X	X
MH101	BASEMENT HVAC PLAN			X				
MH111	1ST FLOOR HVAC PLAN	X	X	X	X	X	X	X
MP101	BASEMENT HYDRONIC PLAN			X	X	X	X	X
MP111	1ST FLOOR HYDRONIC PLAN			X	X	X	X	X
MH501	MECHANICAL DETAILS			X	X	X	X	X
MH502	MECHANICAL DETAILS			X	X	X	X	X
MH503	TEMPERATURE CONTROLS SCHEMATICS					X	X	X
MH601	MECHANICAL SCHEDULES			X	X	X	X	X
MH602	MECHANICAL SCHEDULES			X	X	X	X	X

### PLUMBING SHEET LIST

Sheet Number	Sheet Name	10/17/12	12/05/12	12/12/12	12/21/12	01/22/13	02/05/13	03/29/13
P001	PLUMBING NOTES, ABBREVIATIONS, AND LEGENDS	X	X	X	X	X	X	X
PD101	BASEMENT PLUMBING DEMOLITION PLAN	X	X	X	X	X	X	X
PD111	1ST FLOOR PLUMBING DEMOLITION PLAN - UNDER SLAB	X	X	X	X	X	X	X
PD112	1ST FLOOR PLUMBING DEMOLITION PLAN - ABOVE CEILING	X	X	X	X	X	X	X
PP-101	BASEMENT SANITARY PLAN			X	X			
PP101	BASEMENT PLUMBING PLAN				X	X	X	
PP102	BASEMENT DOMESTIC WATER PLAN			X	X			
PP111	1ST FLOOR SANITARY PLAN	X	X	X	X	X	X	X
PP112	1ST FLOOR DOMESTIC WATER PLAN			X	X	X	X	X
PP113	ROOF STORM DRAINAGE PLAN					X	X	
PP301	WASTE AND VENT ISOMETRIC			X	X	X	X	X
PP302	DOMESTIC WATER ISOMETRIC			X	X	X	X	X
PP501	PLUMBING DETAILS			X	X	X	X	X
PP601	PLUMBING SCHEDULES			X	X	X	X	X

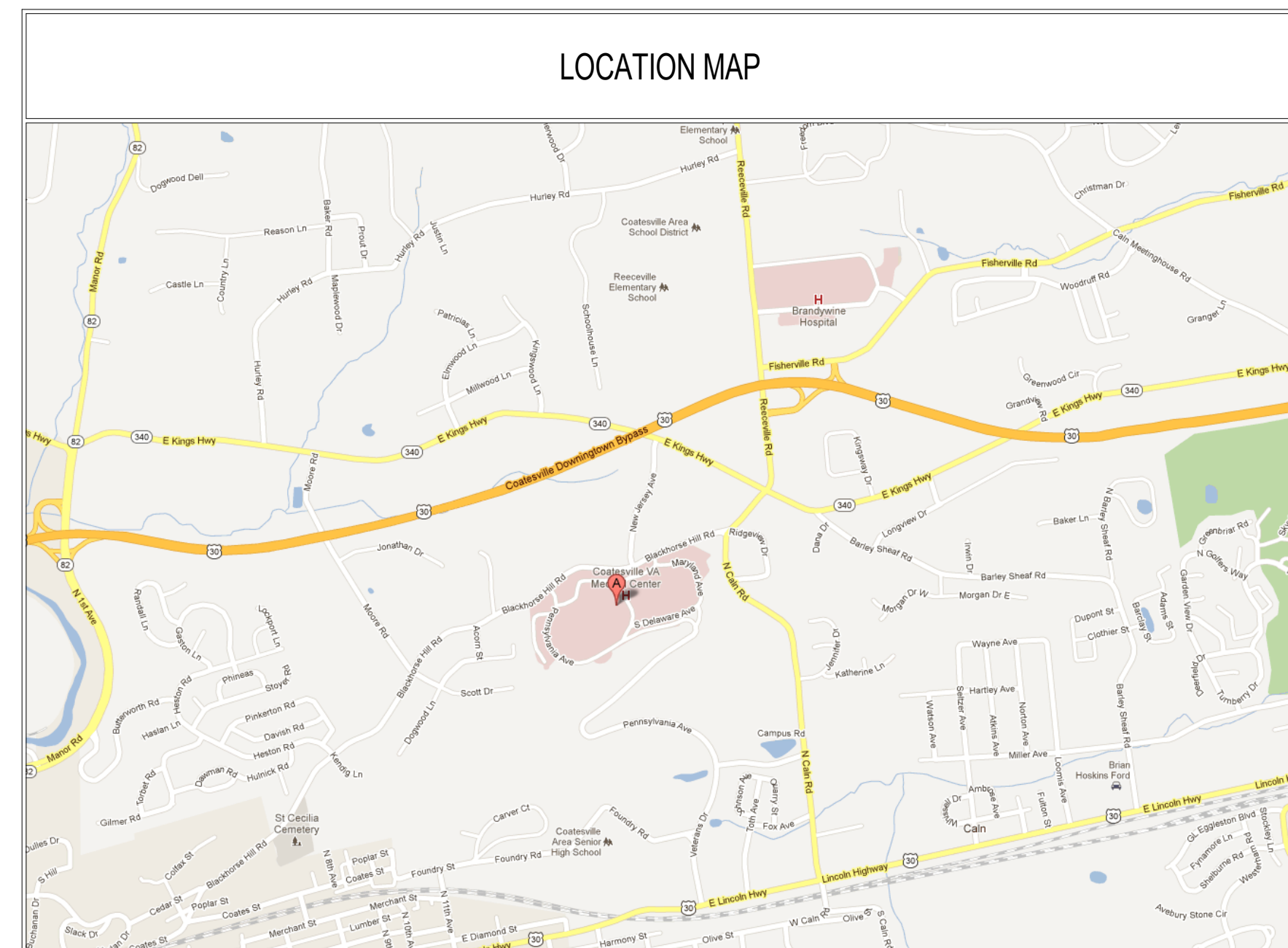
### FIRE PROTECTION SHEET LIST

Sheet Number	Sheet Name						
F101	BASEMENT FIRE SUPPRESSION PLANS				X	X	X
FD101	1ST FLOOR FIRE SUPPRESSION DEMOLITION PLAN				X	X	X
FX101	1ST FLOOR FIRE SUPPRESSION PLAN				X	X	X

### ELECTRICAL SHEET LIST

Sheet Number	Sheet Name						
E001	ELECTRICAL NOTES, ABBREVIATIONS, LEGENDS AND LIGHT FIXTURE SCHEDULE				X	X	X
ED101	BASEMENT ELECTRICAL AND LIGHTING DEMOLITION PLANS				X	X	X
ED102	1ST FLOOR ELECTRICAL DEMOLITION PLAN				X	X	X
ED103	1ST FLOOR LIGHTING DEMOLITION PLAN				X	X	X
E101	BASEMENT POWER AND LIGHTING PLANS				X	X	X
E102	1ST FLOOR POWER AND TELECOMMUNICATIONS PLAN				X	X	X
E103	1ST FLOOR HVAC POWER PLAN				X	X	X
E104	1ST FLOOR LIGHTING PLAN				X	X	X
E105	1ST FLOOR ELECTRICAL SYSTEMS PLAN				X	X	X
E501	ELECTRICAL DETAILS				X	X	X
E601	ELECTRICAL SINGLE-LINE DIAGRAM	X	X		X	X	X
E602	EQUIPMENT CONDUCTOR SCHEDULE AND PANEL SCHEDULES				X	X	X
E603	ELECTRICAL PANEL SCHEDULES				X	X	X
E604	ELECTRICAL PANEL SCHEDULES				X	X	X
E-XX1	1ST FLOOR BKM/CSI COORDINATION HVAC POWER PLAN				X		
FA101	BASEMENT FIRE ALARM AND LIFE SAFETY PLAN, FIRE ALARM RISER AND LEGEND				X	X	X
FA102	1ST FLOOR FIRE ALARM AND LIFE SAFETY PLAN				X	X	X

### LOCATION MAP



Approved by Patient Safety Manager:

Approved by Infection Preventionist:

Approved by Supervisor, Project Section:

Approved by Project Manager (COTR):

Approved by Supervision, Biomed / M&O:

Approved by Environ Health Fire / Safety Section:

Approved by Safety / Occupational Health Manager:

Approved by VA Police Chief:

Approved by Patient Care Section:

Approved by General Properties Section:

Approved by General Utilities Section:

Approved by Medical Center Director:

Approved by Chief Engineer Service:

Approved by Chief, Acquisition Mgt Sect, Contracting Officer:

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### PROJECT MANAGER:

**Bray Mooney Consulting**

Project Number

3627

Scale

12" = 1'-0"

Drawing Title

COVER SHEET

Approved: Project Director

NOTE: SEE SHEET AE-002 FOR DEDUCT ALTERNATES

FULLY SPRINKLERED  
ISSUED FOR BID

Project Title

RENOVATE BUILDING 69

Location

1400 Black Horse Hill, Coatesville, PA

Date

03-29-13

Checked

TN

Drawn

BG

VA Project Number

542-CSI-203

Building Number

69

Drawing Number

GC001

Dwg. 01 of 98

Office of  
Facilities  
Management





three inches = one foot  
one and one half inches = one foot  
one inch = one foot  
three quarters inch = one foot  
three eighths inch = one foot  
one half inch = one foot  
one quarter inch = one foot  
one eighth inch = one foot  
one sixteenth inch = one foot

VA GENERAL CONSTRUCTION NOTES

1.

ALL WORK SHALL BE PERFORMED DURING NORMAL BUSINESS HOURS OF 8:00 AM - 4:30 PM EXCEPT SATURDAY, SUNDAY AND HOLIDAYS, UNLESS APPROVED IN ADVANCE BY THE CONTRACTING OFFICER.

2.

THE CONTRACTOR MAY BE REQUIRED TO WORK OFF HOURS AND OVERTIME TO COMPLETE OR CONSTRUCT PORTIONS OF THIS WORK IN COMPLIANCE WITH THE CONTRACT STIPULATED TIME PERIOD OR AS DIRECTED BY THE CONTRACTING OFFICER AT NO ADDITIONAL COST TO THE GOVERNMENT.

3.

CONTRACTOR SHALL COMPLY WITH THE LATEST EDITIONS OF ALL OSHA REGULATIONS AND REQUIREMENTS AT THEIR OWN EXPENSE.

4.

CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ON SITE, THE LOCATIONS OF EXISTING UTILITIES, EXISTING CONDITIONS, FIELD MEASUREMENTS AND DIMENSIONS, AND QUANTITIES.

5.

THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THE LOCATION, (DEPTH, DIRECTION, SIZE) OF ALL EXISTING UTILITIES IN THE VICINITY OF THE WORK AREA. THE CONTRACTOR SHALL REPAIR ANY UTILITY (DISRUPTED), BROKEN, OR OTHERWISE RENDERED NON-FUNCTIONAL, DUE TO THE WORK PERFORMED AT NO ADDITIONAL COST TO THE GOVERNMENT.

6.

THE CONTRACTOR SHALL IDENTIFY ANY NON-FUNCTIONING UTILITY/SYSTEM PRIOR TO THE START OF WORK TO THE CONTRACTING OFFICER. IDENTIFICATION OF SUCH AFTER THE START OF WORK SHALL BE DEEMED AS DISTURBED OR DAMAGED BY THE CONTRACTOR AND SHALL BE REPAIRED BY AND AT THE EXPENSE OF THE CONTRACTOR.

7.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE PROPER SUPPORT OF ANY UTILITY ENCOUNTERED IN THE COURSE OF THIS WORK.

8.

THE CONTRACTOR SHALL LEAVE THE WORK SITE CLEAN AND SECURED AT THE END OF EACH WORKING DAY. THE WORK SITE SHALL NOT BE LEFT UNATTENDED AT ANY TIME, UNLESS THE WORK AREA IS PROPERLY SECURED.

9.

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE SAFETY OF THE WORKSITE AND SHALL TAKE ALL ACTIONS TO ELIMINATE ANY SAFETY HAZARDS THAT MAY POSE A THREAT OF HARM TO PATIENTS, EMPLOYEES OF THE GOVERNMENT, AND EMPLOYEES OF THE CONTRACTOR OR OTHERS. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO TAKE IMMEDIATE ACTION TO ALLEVIATE ANY SAFETY HAZARD THAT MAY EXIST WITHOUT DIRECTION FROM THE CONTRACTING OFFICER OR HIS DESIGNEE. THE CONTRACTOR SHALL ALSO TAKE IMMEDIATE CORRECTIVE ACTION TO ALLEVIATE ANY SAFETY HAZARD, CONDITION, ETC. WHEN INDICATED BY THE CONTRACTING OFFICER.

10.

THERE SHALL BE NO CLAIMS AGAINST THE DEPARTMENT OF VETERANS AFFAIRS FOR WORK STOPPAGES DUE TO ACTS OF GOD, WEATHER CONDITIONS, STOP WORK ORDERS (VERBAL AND/OR WRITTEN), UNDERESTIMATION OF WORK, ESTIMATED QUANTITIES, MATERIALS, SUPPLIES, TOOLS, OR CORRECTION OF SAFETY PROBLEMS.

11.

CONTRACTOR SHALL SAW CUT WITH A PROPER BLADE ANY CONCRETE WORK REQUIRED TO BE REMOVED IN THE COURSE OF THIS WORK. ALL HOLES SHALL BE CORED DRILLED WITH DIAMOND CORE BITS. THE USE OF JACK HAMMERS IS PROHIBITED.

12.

CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE ALL DEBRIS FROM THE MEDICAL CENTER DAILY AND DISPOSE OF SAME OFF THE PREMISES IN ACCORDANCE WITH PERTINENT REGULATIONS.

13.

CONTRACTOR SHALL PROVIDE FOR THEIR OWN STORAGE SPACE AND SECURITY FOR SAME. CONTRACTOR IS PROHIBITED FROM USING VA SPACE FOR STORAGE.

14.

CONTRACTOR SHALL BE RESPONSIBLE TO REROUTE ANY EXISTING UTILITY AS REQUIRED TO COORDINATE THE INSTALLATION OF NEW WORK IN THE COURSE OF THIS PROJECT. THE CONTRACTOR IS ADVISED THAT THE VETERANS ADMINISTRATION HAS ATTEMPTED TO IDENTIFY MAJOR UTILITIES TO BE REROUTED.

15.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS, DIMENSIONS AND QUANTITIES.

16.

CONTRACTOR SHALL INSTALL AND MAINTAIN DUST BARRIERS AS REQUIRED TO MAINTAIN INFECTION CONTROL, AS INDICATED ON THE DRAWINGS.

17.

PRIOR TO ANY WELDING, CUTTING, BRAZING, SOLDERING, THE CONTRACTOR SHALL BE REQUIRED TO OBTAIN A HOT WORK PERMIT FROM THE DEPARTMENT OF VETERANS AFFAIRS FIRE DEPARTMENT.

18.

CONTRACTOR SHALL MAINTAIN SECURITY FOR THE WORK AREA AND PROVIDE KEYS TO THE CONTRACTING OFFICER FOR ACCESS.

19.

THE CONTRACTOR SHALL MAINTAIN THE WORK SITE IN A NEAT AND CLEAN CONDITION. THE WORK SITE SHALL BE BROOM CLEANED AT THE END OF EACH WORKING DAY.

20.

THE CONTRACTOR'S EMPLOYEES SHALL PARK IN APPROVED OR DESIGNATED PARKING SPACES ONLY.

21.

ANY RIGGING REQUIRED SHALL BE PERFORMED BY PROFESSIONAL RIGGERS AT THE EXPENSE OF THE CONTRACTOR.

22.

THE CONTRACTOR IS RESPONSIBLE FOR TESTING THE SOIL BEARING PRESSURE PRIOR TO CONSTRUCTION. RESULTS ARE TO BE PRESENTED TO THE ARCHITECT AND ENGINEERS.

CONTRACTOR GENERAL NOTES

1.

DRAWINGS AND SPECIFICATIONS ARE ONLY TO DEPICT GRAPHICALLY THE GENERAL NATURE OF THE WORK AND SHOW THE GENERAL EXTENT OF THE PROJECT, AND DO NOT NECESSARILY INDICATE OR DESCRIBE ALL WORK REQUIRED FOR FULL PERFORMANCE AND COMPLETION OF THE REQUIREMENTS. WORK DO THEY SHOW ALL OF THE CONDITIONS WHICH MAY BE ENCOUNTERED TO PROPERLY EXECUTE THE WORK, ON THE BASIS OF THE GENERAL SCOPE INDICATED OR DESCRIBED. THE CONTRACTOR SHALL FURNISH ALL WORK ITEMS REQUIRED FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK.

2.

IT IS THE INTENT OF THE CONTRACT DOCUMENTS FOR ALL WORK TO BE IN CONFORMANCE WITH AUTHORITIES HAVING JURISDICTION OVER THIS TYPE OF WORK AND OCCUPANCY.

3.

THE CONTRACTOR SHALL NOT RELY ON THE ARCHITECT SITE VISITS TO DISCOVER DEFECTS AND DEFICIENCIES IN THE WORK. THE CONTRACTOR SHALL DETERMINE THAT THE WORK IS BEING PERFORMED IN COMPLIANCE WITH THE CONTRACT DOCUMENTS.

4.

THE CONTRACTOR SHALL COMPLY WITH THE OWNER PROCEDURES / REQUIREMENTS FOR ELEVATOR USE, RUBBISH REMOVAL, LOADING DOCK, PROTECTION OF EXISTING CONSTRUCTION, AND ANY OTHER WORK WHICH WILL AFFECT OTHER TENANTS OR OTHER PARTS OF THE BUILDING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ARRANGING ELEVATOR AND/OR LOADING DOCK USE FOR DELIVERY OF MATERIALS WITH THE OWNER.

5.

THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR OR REPLACE ANY DAMAGED BUILDING AREAS CAUSED AS A RESULT OF WORK PERFORMED IN CONNECTION WITH THIS CONTRACT.

6.

THE CONTRACTOR SHALL PROVIDE TEMPORARY "PATHS OF EGRESS" THROUGH THE AREAS OF THE WORK. SUCH PATHS SHALL BE PROVIDED BY THE CONTRACTOR WITH ADEQUATE ARTIFICIAL LIGHT, DIRECTION SIGNS, CLEARANCES, FIRE PROTECTION, ETC., AND SHALL BE CONSTRUCTED AND MAINTAINED SAFE FROM FIRE, SMOKE, AND OTHER PHYSICAL DANGERS.

7.

THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRIAGES, LIGHTS, AND OTHER WARNING DEVICES AT ALL DITCHES, OPEN EXCAVATION, AND OTHER AREAS OF POTENTIAL DANGER TO PERSONNEL OR PUBLIC. ALL ITEMS SHALL COMPLY WITH ALL APPLICABLE LAWS, REGULATIONS AND ORDINANCES.

8.

THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY STAIRS TO ALL LEVELS OF CONSTRUCTION UNTIL PERMANENT STAIRS ARE COMPLETED. ALL STAIRS SHALL BE MAINTAINED OPEN AND CLEAR AT ALL TIMES. THE STAIR CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE LAWS, REGULATIONS AND ORDINANCES.

9.

THE CONTRACTOR SHALL TURN THE WORK OVER IN CLEAN CONDITION INSIDE AND OUTSIDE. CLEANUP SHALL INCLUDE REMOVAL OF SMUDGES, MARKS, STAINS, FINGERPRINTS, SOIL, DIRT, PAINT, DUST, LINT, LABELS, DISCOLORATIONS AND OTHER FOREIGN MATERIALS. THE CONTRACTOR SHALL CLEAN ALL FINISHED SURFACES INSIDE AND OUTSIDE OF BUILDINGS, SUCH AS, BUT NOT LIMITED TO, FLOORS, WALLS, CEILINGS, WINDOW GLASS, DOORS, FIXTURES, HARDWARE AND EQUIPMENT. SHALL CLEAN ALL WORK ON THE SITE SUCH AS, BUT NOT LIMITED TO, WALKS, DRIVES, CURBS, PAVING, FENCES, GROUNDS, AND WALLS. SHALL REMOVE ALL TEMPORARY FACILITIES AND JOB SIGNS, INCLUDING SURFACE MATERIALS FOR TEMPORARY ROADS AND WALKWAYS. SHALL REPAIR ALL AREAS DAMAGED DURING THE WORK. IT SHALL BE UNDERSTOOD BY THE CONTRACTOR THAT THE QUALITY OF CLEANING AND POLISHING REQUIRED FOR ACCEPTANCE OF EACH AREA SHALL BE IN ACCORD WITH THE INTENDED USE OF EACH AREA AND MAY BE IN EXCESS OF THE NORMAL PRACTICES OF THE CONSTRUCTION INDUSTRY.

10.

THE CONTRACTOR SHALL PROVIDE LARGE VOLUME WASTE CONTAINERS ON THE SITE WITHIN THE CONSTRUCTION AREA. IN MUNICIPALITIES WHERE RECYCLING IS REQUIRED BY ORDINANCE, THE CONTRACTOR SHALL PROVIDE AN APPROPRIATE NUMBER OF CONTAINERS TO ALLOW SEPARATION OF MATERIAL. AT THE END OF EACH WORKING DAY ALL DEBRIS RESULTING FROM THE DAY'S WORK SHALL BE TRANSPORTED TO AND PLACED IN THE APPROPRIATE WASTE CONTAINERS.

11.

THE CONTRACTOR SHALL PROVIDE FIRE PROTECTION AT EACH WASTE CONTAINER AS REQUIRED BY LOCAL AUTHORITIES.

12.

THE PROTECTION OF THE PROPERTY UNDER THE CONTRACTOR'S CONTROL AT ALL TIMES IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL CONTINUOUSLY MAINTAIN ADEQUATE PROTECTION OF ALL WORK FROM VANDALISM, THEFT AND OTHER DAMAGE, AND SHALL PROTECT THE OWNER'S PROPERTY AND ADJACENT PROPERTY FROM DAMAGE. ANY LOSS SHALL BE REPLACED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.

13.

THE CONTRACTOR SHALL INSTALL AND ACTIVATE FIRE LINES AND PERMANENT, OR TEMPORARY, FIRE HOSE CABINETS AND PROVIDE ADEQUATE FIRE EXTINGUISHERS THROUGHOUT THE LIMIT OF WORK PRIOR TO BEGINNING WORK. THE CONTRACTOR SHALL MAINTAIN SUCH EQUIPMENT IN WORKING ORDER THROUGHOUT CONSTRUCTION. THE TYPE, QUANTITY AND LOCATION OF THIS EQUIPMENT SHALL BE REASONABLY ADEQUATE TO SUIT THE CONDITIONS AND COMPLY WITH ALL APPLICABLE LAWS, REGULATIONS AND ORDINANCES.

14.

THE CONTRACTOR SHALL PROVIDE AND MAINTAIN IN A SAFE CONDITION ALL THOSE ITEMS REQUIRED FOR SUPPORTING OR CONTAINING ALL PERSONS INVOLVED IN THE WORK, OR INCIDENTAL TO ITS EXECUTION, INCLUDING INSPECTORS, SUPERVISORS, ARCHITECTS REPRESENTATIVES, FIELD TESTING PERSONNEL, ETC. SUCH ITEMS SHALL INCLUDE LADDERS, CATWALKS, SAFETY RAILINGS, CAGES, SUSPENSION SCAFFOLDS, ETC. ALL ITEMS AND THEIR PROPER USE AND IMPLEMENTATION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF ALL APPLICABLE LAWS, REGULATIONS AND ORDINANCES.

MATERIAL LEGEND

SECTIONS

ACOUSTICAL TILE

ALUMINUM (3/4 SCALE OR LARGER)

BATT OR BLANKET INSULATION

BRASS OR BRONZE (3/4 SCALE OR LARGER)

CERAMIC OR QUARRY TILE

CONCRETE

CONCRETE MASONRY UNIT

CRUSHED STONE OR GRAVEL

EARTH

EL.F.S. (EXTERIOR INSULATION AND FINISH SYSTEM)

FACE BRICK

FINISHED WOOD (FOR LARGE SCALE DETAILS)

FIRE SAVING

MEDIUM DENSITY FIBERBOARD

PLASTER, CEMENT, MORTAR OR G.W.B.

PLYWOOD VENEER

PRE-CAST CONCRETE

RIGID INSULATION

ROUGH WOOD (ALL BLOCKING AND FRAMING LUMBER)

SHIM

SPRAY-ON FIREPROOFING

STEEL (3/4 SCALE OR LARGER)

STONE: GRANITE OR MARBLE

ARCHITECTURAL GENERAL NOTES

1.

SEE SHEET AE704 FOR EQUIPMENT SCHEDULE.

2.

SEE SHEET AE701 FOR DOOR SCHEDULE.

3.

SEE SHEET AE701 FOR WINDOW SCHEDULE.

4.

SEE SHEET AE702 FOR TOILET ACCESSORY SCHEDULE.

5.

SEE SHEET AE704 FOR FINISH SCHEDULE.

ARCHITECTURAL GENERAL NOTES

1.

PROJECT MANUAL, DRAWINGS AND ADDITIONAL, OWNER PROVIDED INFORMATION DESCRIBE THE EXTENT OF THE WORK. DRAWINGS AND SPECIFICATIONS ARE INTENDED TO BE COMPLEMENTARY. ANY WORK EXHIBITED IN EITHER OF THEM WHETHER IN THE OTHER OR NOT, IS TO BE EXECUTED AS PART OF THE WORK. WHERE ITEMS OF MATERIAL, EQUIPMENT AND LABOR ARE REFERRED TO IN THE SINGULAR, SUCH ITEM OR ITEMS SHALL BE PROVIDED IN THE NUMBER NECESSARY FOR THE PROPER COMPLETION OF THE WORK. THE DRAWINGS ARE A GRAPHIC REPRESENTATION OF THE SCOPE, LOCATION AND ARRANGEMENT OF MATERIALS AND EQUIPMENT SHOWING THE EXECUTION OF THE WORK. THE INTENT OF THE SPECIFICATIONS IS TO OUTLINE OR INDICATE THE ITEMS OF WORK, OR OTHER, WHICH CANNOT READILY BE SHOWN ON THE DRAWINGS, AND FURTHER TO INDICATE THE TYPES AND QUALITIES OF MATERIALS AND WORKMANSHIP. SHOULD THE SPECIFICATIONS AND DRAWINGS DISAGREE IN THEMSELVES, OR WITH EACH OTHER, WRITTEN CLARIFICATIONS SHOULD BE REQUESTED OF THE ARCHITECT BY THE CONTRACTOR.

2.

THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS REQUIRED TO COMPLETE THE WORK. ALL THE WORK SHALL BE INSTALLED WITH QUALITY WORKMANSHIP IN ACCORDANCE WITH INDUSTRY STANDARDS AND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

3.

THE CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE APPLICABLE CODE AND ALL APPLICABLE COUNTY, CITY, STATE, FEDERAL LAWS AND REGULATIONS. NO WORK SHALL BE INSTALLED IN VIOLATION OF ANY CODES. ANY WORK SHOWN ON THE DRAWINGS WHICH IS IN VIOLATION OF SUCH CODES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND SHALL BE RESOLVED PRIOR TO THE INSTALLATION OF THE WORK INVOLVED.

4.

ANY UTILITY SHUT-OFFS REQUIRED BY CONTRACTORS FOR THE COMPLETION OF THEIR WORK SUCH AS ELECTRICAL, GAS, WATER, SEWER, STEAM, SPRINKLER, ETC., MUST BE INDICATED ON THE PROJECT SCHEDULE, REVIEWED AT THE PROJECT MEETING, AND COORDINATED WITH THE OWNER PRIOR TO COMMENCEMENT OF THE WORK.

5.

THE CONTRACTOR SHALL PROVIDE CHASES TO CONCEAL MECHANICAL, PLUMBING AND ELECTRICAL WORK. PIPING LOCATED INSIDE THE BUILDING SHALL BE CONCEALED IN FLURRED SPACES WITH THE EXCEPTION OF PIPING IN STAIRWAYS, EQUIPMENT ROOMS, AND MECHANICAL ROOMS. THE CONTRACTOR SHALL COORDINATE WITH THE OTHER TRADES TO PROVIDE FLURRED SPACES FOR PIPING INSTALLED IN FINISHED AREAS. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ARCHITECT PRIOR TO LOCATING AND/OR PROVIDING "FLURRED SPACES" NOT INDICATED ON THE DRAWINGS.

7.

EACH CONTRACTOR IS RESPONSIBLE TO COORDINATE THE SEQUENCE OF THEIR WORK WITH THAT OF ALL OTHER TRADES ANY CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT, AND SHALL BE RESOLVED PRIOR TO THE INSTALLATION OF THE WORK INVOLVED.

8.

EACH CONTRACTOR SHALL COORDINATE WITH OTHER CONTRACTORS FOR THE PROPER STORAGE OF BUILDING MATERIALS ON THE SITE TO AVOID OVERLOADING THE FLOOR OR IMPEDING WITH COMPLETION OF THE WORK. MATERIALS ARE TO BE PROPERLY DISPOSED OVER BEAMS BETWEEN COLUMNS.

9.

WHERE NEW WORK CONNECTS WITH EXISTING, THE CONTRACTOR SHALL DO ALL NECESSARY CUTTING, FITTING, AND PATCHING. CONTRACTOR SHALL FURNISH ALL NECESSARY LABOR AND MATERIALS TO EXECUTE WORK.

10.

ALL MATERIALS AND METHODS OF INSTALLATION SHALL CONFORM TO THE MANUFACTURER'S SPECIFICATIONS AND INSTALLATION INSTRUCTIONS.

ARCHITECTURAL FLOOR PLAN GENERAL NOTES

1.

DO NOT SCALE DRAWINGS. DIMENSIONS IN LARGE SCALE PLANS, ELEVATIONS, AND DETAILS SHALL GOVERN OVER SMALL SCALE DETAILS. IF DIMENSIONS ARE IN QUESTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CLARIFICATION FROM THE ARCHITECT BEFORE CONTINUING WITH CONSTRUCTION.

2.

DIMENSIONS SHOWN ON THE FLOOR PLANS FOR NEW CONSTRUCTION ARE TO CENTERLINE OF COLUMNS TO FINISH FACE OF INTERIOR PARTITION, CONCRETE OR MASONRY INTERIOR WALLS AND TO EXTERIOR FACE OF EXTERIOR WALLS.

3.

WHERE A ONE HOUR OR NON-RATED PARTITION IS SHOWN AS A CONTINUATION OF A TWO HOUR PARTITION OR COLUMN ENCASEMENT, THE FACE OF THE GYPSUM BOARD SHALL BE ALIGNED. STUDS SHALL BE OFFSET AND AN ADDITIONAL LAYER OF GYPSUM BOARD SHALL BE PROVIDED TO PROVIDE FACE ALIGNMENT OF GYPSUM BOARD.

4.

ALL WALL MOUNTED LAVATORIES SHALL BE MOUNTED TO ALLOW FOR 1" MINIMUM BETWEEN THE CENTERLINE OF THE LAVATORY AND FACE OF ADJACENT WALL, UNLESS OTHERWISE NOTED. THERE IS AN ADDITIONAL REQUIREMENT TO PROVIDE A MINIMUM OF 4" BETWEEN SIDE OF LAVATORY AND FACE OF ADJACENT WALL, FIXED EQUIPMENT, CASEWORK, ETC.

5.

ALL WATER CLOSETS SHALL BE MOUNTED SO THAT THERE IS 1" BETWEEN FACE OF THE CLOSEST ADJACENT SIDE WALL OR TOILET PARTITION AND THE CENTERLINE OF THE WATER CLOSET. THE FLUSH VALVE FOR ALL WATER CLOSETS SHALL BE MOUNTED ON THE "OPENMOST" SIDE OF THE WATER CLOSET AT 44" MAXIMUM A.F.F. TO THE TOP.

6.

DIMENSIONS SHALL BE FIELD VERIFIED PRIOR TO FABRICATION AND INSTALLATION OF CASEWORK. REFER TO CASEWORK NOTES FOR ADDITIONAL INFORMATION.

7.

CONTRACTOR SHALL BE RESPONSIBLE FOR LATEXING AND TAPERING EXISTING CONCRETE FLOOR SLAB WHERE MATERIAL CHANGES OCCUR AND SHALL COORDINATE SAME WITH INSTALLER.

8.

CONTRACTOR SHALL BUILD OUT PARTITIONS TO ACCOMMODATE DEPTH REQUIRED BY FIRE EXTINGUISHER CABINETS AND RECESSED POWER PANELS. COORDINATE WITH ENGINEERING DRAWINGS. FINAL LOCATIONS OF ALL CABINETS AND PANELS TO BE APPROVED BY ARCHITECT.

9.

PROVIDE METAL STUD FRAMING AROUND ALL PENETRATIONS THRU METAL STUD PARTITIONS.

10.

THE FLOOR SLAB SHALL BE SLOPED (2%) TO DRAIN. DO NOT INTERRUPT INTEGRITY OF FIRE RATING OF RAISED FLOOR SLAB.

SYMBOL LEGEND

ROOM INDICATION

ROOM NAME

ROOM NUMBER

NORTH ARROW

N

SITE PLAN NORTH ARROW

NORTH

DOOR SYMBOL

101

WINDOW SYMBOL

1

ON ELEVATION

OR BORROWED LIGHT

IN PLAN

BUILDING WALL SECTION INDICATION

1

SECTION NUMBER

A101

SHEET WHERE SHOWN

ELEVATION INDICATION

F2

A1

A2

A3

A4

A201

INTERIOR AND/OR EXTERIOR

A1

A201

FIRE EXTINGUISHER CABINET

F.E.C.

DETAIL INDICATION

1

SM

A101

DETAIL NUMBER

SHEET WHERE SHOWN

REVISION INDICATION

1

REVISION NUMBER

ALIGN WITH EXISTING CONSTRUCTION

A

PARTITION TYPE SYMBOL

1

PARTITION TYPE

EQUIPMENT DESIGNATION

(SEE EQUIPMENT MANUAL)

001

EQUIPMENT TYPE

CEILING HEIGHT

10' 6" A.F.F.

FINISH SYMBOLS

ROOM FINISH TAG

SM 001

WALL

CEILING

FLOOR

BASE

FINISH

CS

DENOTES CORNER GUARD LOCATION

LINE TYPE SYMBOLS

1

EXISTING COLUMN GRID DENOTED WITH AN "E" PREFIX

1

COLUMN GRID

--- --

LIMIT OF WORK

---

PROPERTY LINE

---

CENTER LINE / ELEVATION LINE

---

WORK ABOVE, BEYOND OR TO BE REMOVED

---

BUMPER GUARD, CHAIR RAIL, HAND RAIL FOR LOCATION SEE PLANS

---

BREAK LINE

MATCHLINE

AREA A

A102

INDICATOR OF AREA SHOWN ON DRAWING

SHEET NUMBER OF ADJACENT DRAWING

KEYNOTE SYMBOL

02

KEYNOTE INDICATOR

EXISTING DOOR DESIGNATION

EXISTING DOOR

NEW DOOR DESIGNATION

NEW DOOR

EMERGENCY DOOR DESIGNATION

NEW DOOR

EMERGENCY SWING

DOUBLE EGRESS DOOR DESIGNATION

NEW DOOR

STARTING POINT

+

STARTING POINT

ELEVATION TAG

Name

Elevation

GENERAL DIMENSIONING

0'-0"

COLUMN GRID CENTERLINE INDICATOR

0'-0"

FACE OF SURFACE INDICATOR

0'-0" ±

0'-0"

NOTE: THE ± INDICATES A DIMENSION THAT CAN VARY (NOTIFY THE ARCHITECT OF ANY CHANGE IN THAT DIMENSION IF IT IS GREATER THAN 1")

NOTE: EXISTING DIMENSIONS INDICATED AS (E-01) OR WITH (VIF) ARE SUPPLIED TO THE ARCHITECT BY OTHERS AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR. (SEE "GENERAL CONTRACTOR RESPONSIBILITIES WITH RESPECT TO EXISTING CONDITION NOTES")

F2 VA CONSTRUCTION SIGN  
1/2" = 1'-0"

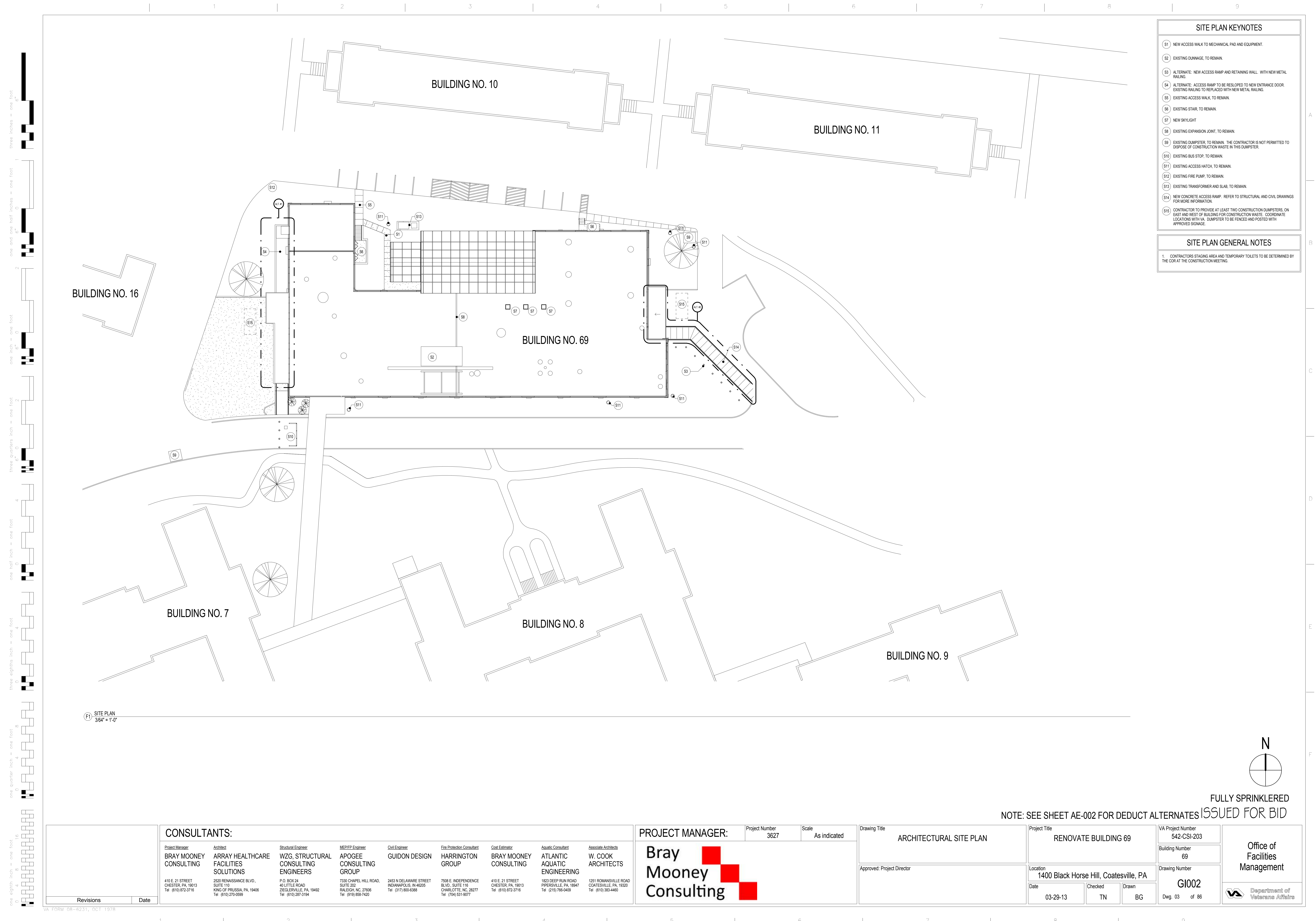
F4 VA SAFETY SIGN  
1/2" = 1'-0"

Revisions		Date	

CONSULTANTS:		PROJECT MANAGER:		Project Number	Scale	Drawing Title		Project Title		VA Project Number	Office of Facilities Management								
Project Manager	Architect	Structural Engineer	MEP/FP Engineer	Civil Engineer	Fire Protection Consultant	Cost Estimator	Aquatic Consultant	Associate Architects	1400 Black Horse Hill, Coatesville, PA	542-CSI-203									
BRAY MOONEY CONSULTING		ARRAY HEALTHCARE FACILITIES SOLUTIONS		WZG, STRUCTURAL ENGINEERS		APOGEE CONSULTING GROUP		GUIDON DESIGN		HARRINGTON GROUP									
410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716		2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA 19406 Tel: (610) 279-0599		P.O. BOX 24 40 LITTLE ROAD ZIEGLERSVILLE, PA 19422 Tel: (610) 287-3194		7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC 27606 Tel: (919) 858-7420		2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 600-6388		7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC 28277 Tel: (704) 531-9077									
410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716		1823 DEEP RUN ROAD PIPERVILLE, PA 18447 Tel: (215) 786-0409		1251 ROMANSVILLE ROAD COATESVILLE, PA 19320 Tel: (610) 383-4460		410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716		Approved: Project Director		Location									
										Date									
										Checked									
										Drawn									
										Dwg. 02 of 86									

VA FORM DB-6231, OCT 1978

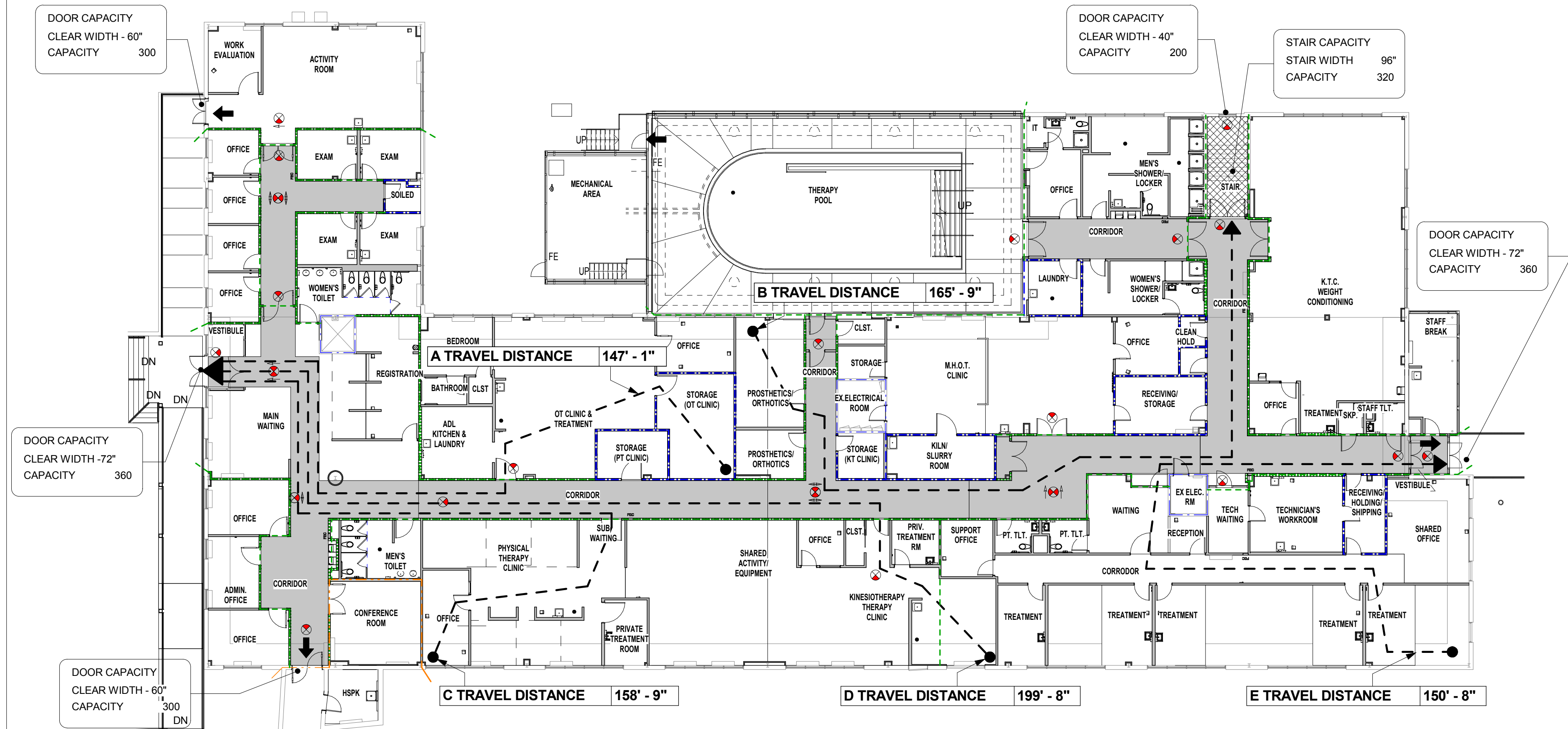




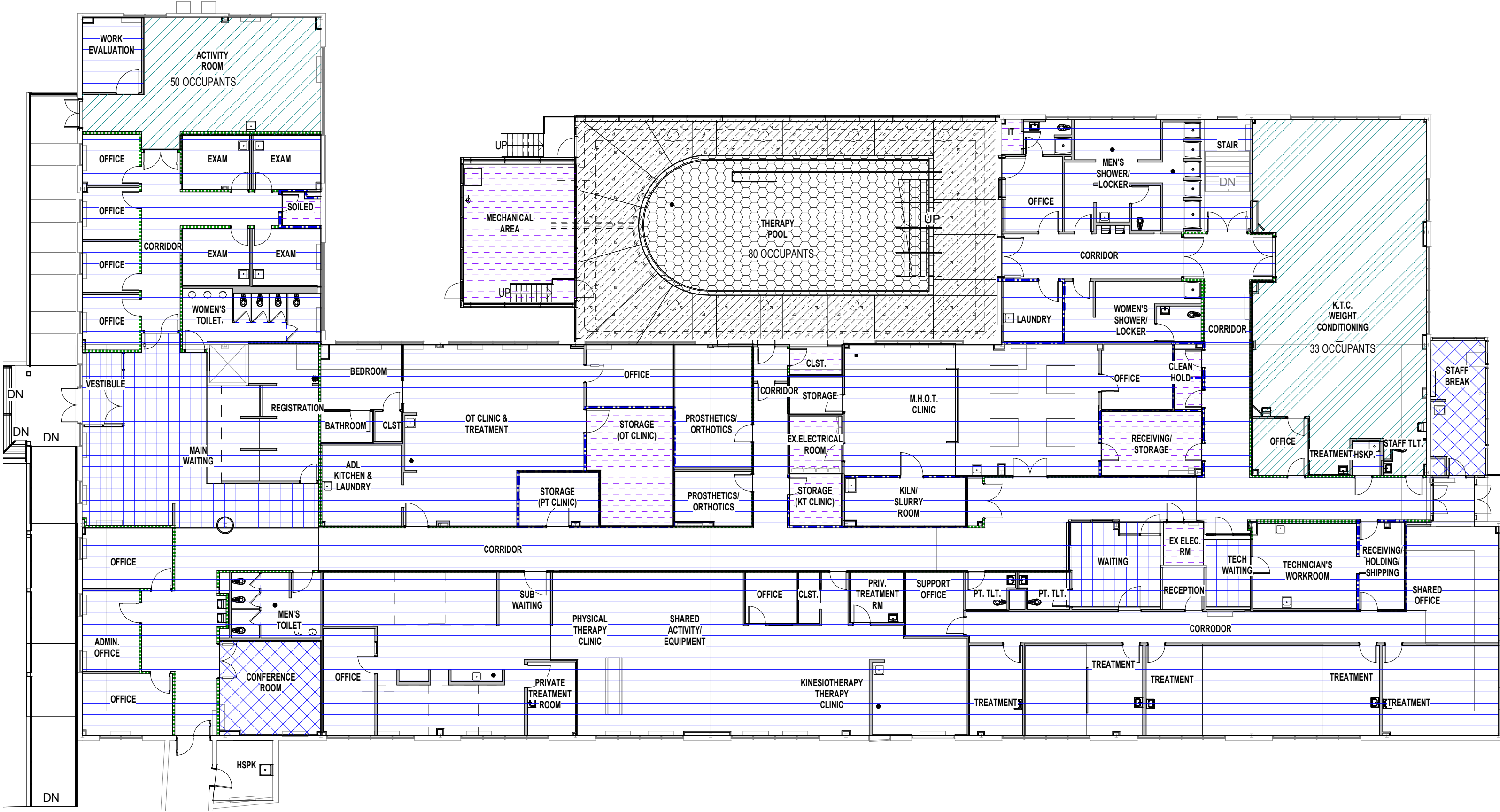
- SITE PLAN KEYNOTES**
- S1 NEW ACCESS WALK TO MECHANICAL PAD AND EQUIPMENT.
  - S2 EXISTING DUNNAGE, TO REMAIN.
  - S3 ALTERNATE: NEW ACCESS RAMP AND RETAINING WALL WITH NEW METAL RAILING.
  - S4 ALTERNATE: ACCESS RAMP TO BE RESLOPED TO NEW ENTRANCE DOOR. EXISTING RAILING TO BE REPLACED WITH NEW METAL RAILING.
  - S5 EXISTING ACCESS WALK, TO REMAIN.
  - S6 EXISTING STAIR, TO REMAIN.
  - S7 NEW SKYLIGHT
  - S8 EXISTING EXPANSION JOINT, TO REMAIN.
  - S9 EXISTING DUMPSTER, TO REMAIN. THE CONTRACTOR IS NOT PERMITTED TO DISPOSE OF CONSTRUCTION WASTE IN THIS DUMPSTER.
  - S10 EXISTING BUS STOP, TO REMAIN.
  - S11 EXISTING ACCESS HATCH, TO REMAIN.
  - S12 EXISTING FIRE PUMP, TO REMAIN.
  - S13 EXISTING TRANSFORMER AND SLAB, TO REMAIN.
  - S14 NEW CONCRETE ACCESS RAMP. REFER TO STRUCTURAL AND CIVIL DRAWINGS FOR MORE INFORMATION.
  - S15 CONTRACTOR TO PROVIDE AT LEAST TWO CONSTRUCTION DUMPSTERS, ON EAST AND WEST OF BUILDING FOR CONSTRUCTION WASTE. COORDINATE LOCATIONS WITH VA. DUMPSTER TO BE FENCED AND POSTED WITH APPROVED SIGNAGE.

- SITE PLAN GENERAL NOTES**
- CONTRACTORS STAGING AREA AND TEMPORARY TOILETS TO BE DETERMINED BY THE COR AT THE CONSTRUCTION MEETING.





C1 FIRST FLOOR LIFE SAFETY PLAN  
1/16" = 1'-0"

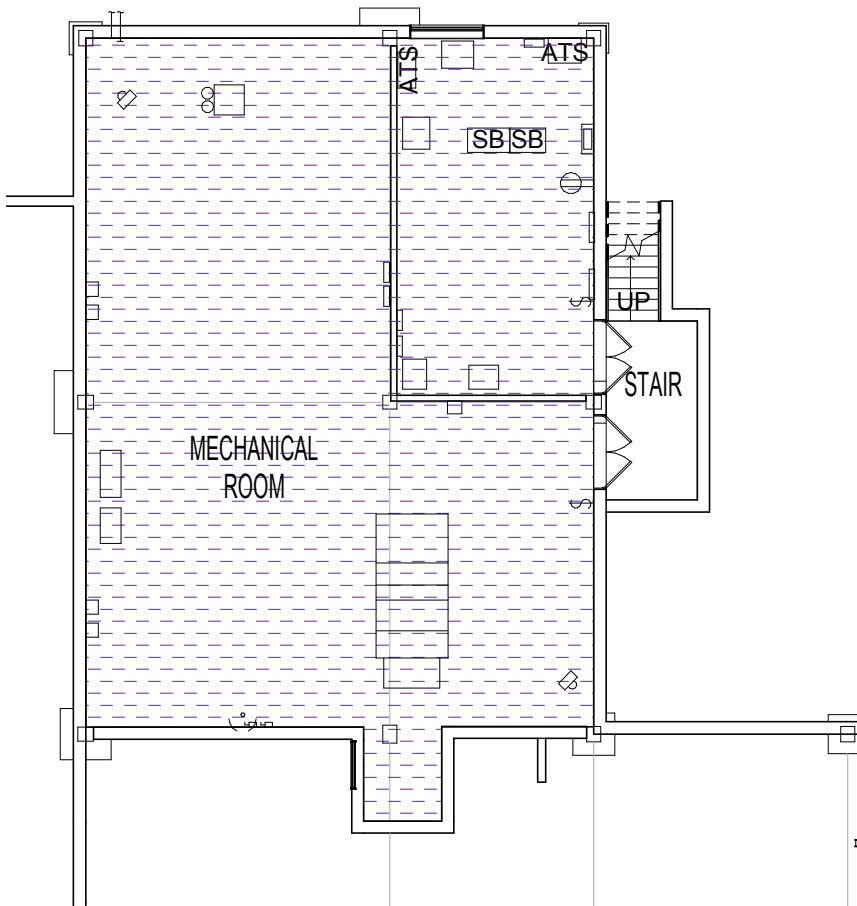


F1 FIRST FLOOR OCCUPANCY PLAN  
1/16" = 1'-0"

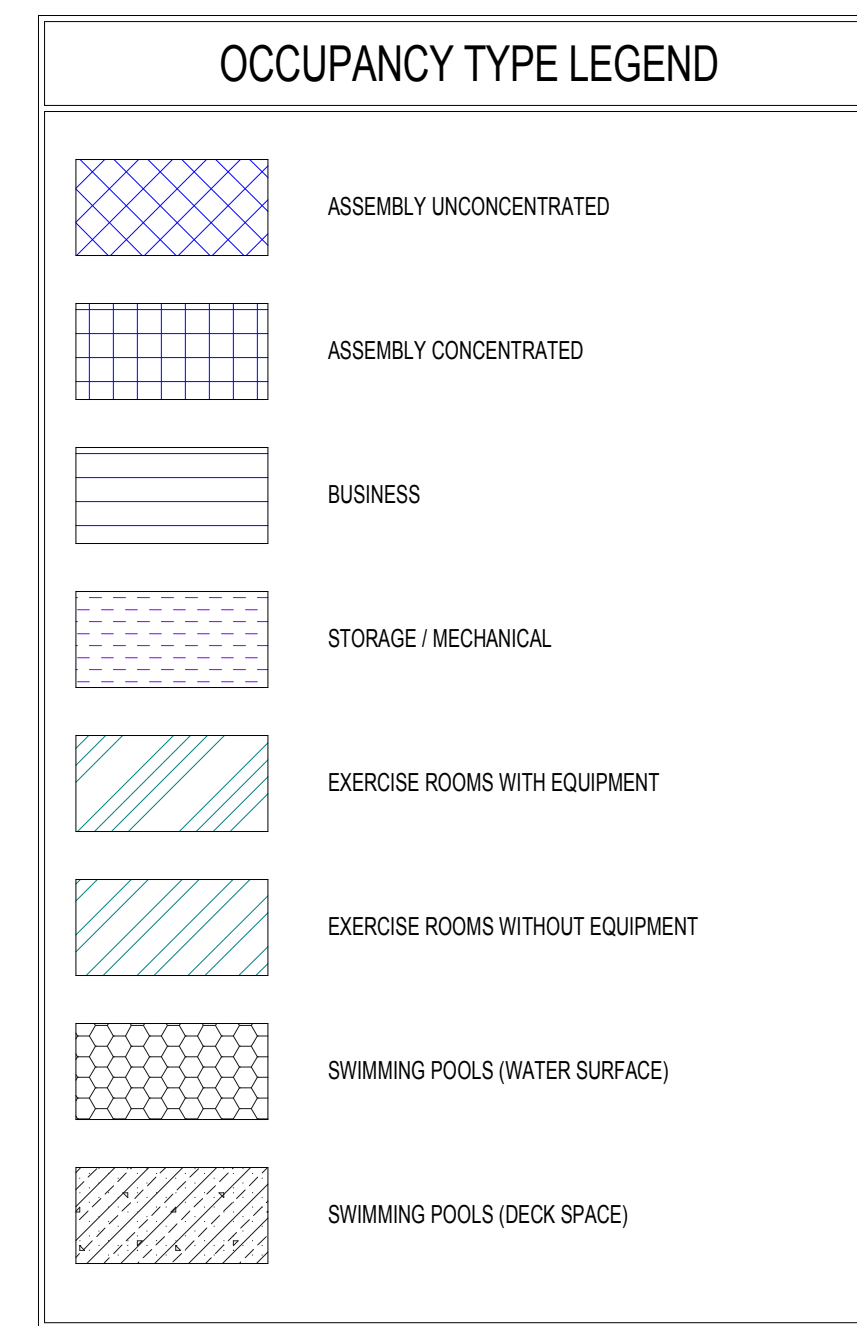
PROJECT AREA SUMMARY	
EXISTING BASEMENT	2,481 S.F.
EXISTING FIRST FLOOR	22,780 S.F.
NEW ADDITION	3,388 S.F.
TOTAL AREA	28,629 S.F.

BUILDING CONSTRUCTION TYPE	
NFPA 101 2012	IBC 2012
TYPE 2 (000)	2B

BUILDING OCCUPANT LOAD				
EXISTING BASEMENT				
USE	AREA (SF)	SF/PERSON	LOAD	
ASSEMBLY CONCENTRATED	-	7 NET	-	
ASSEMBLY UNCONCENTRATED	-	15 NET	-	
BUSINESS	-	100 GROSS	-	
INPATIENT SLEEPING	-	120 GROSS	-	
INPATIENT TREATMENT	-	240 GROSS	-	
OUTPATIENT TREATMENT	-	100 GROSS	-	
STORAGE/MECHANICAL	2,481 S.F.	300 GROSS	10	
TOTAL LOAD	2,481 S.F.	-	10	
EXISTING FIRST FLOOR				
USE	AREA (SF)	SF/PERSON	LOAD	
ASSEMBLY CONCENTRATED	1,214 S.F.	7 NET	173	
ASSEMBLY UNCONCENTRATED	538 S.F.	15 NET	35	
BUSINESS	17,507 S.F.	100 GROSS	175	
SWIMMING POOLS (WATER SURFACE)	-	50 GROSS	-	
SWIMMING POOLS (DECK)	-	30 GROSS	-	
STORAGE/MECHANICAL	907 S.F.	500 GROSS	2	
EXERCISE ROOMS WITH EQUIPMENT	1,882 S.F.	50 GROSS	38	
EXERCISE ROOMS WITHOUT EQUIPMENT	744 S.F.	15 GROSS	50	
TOTAL LOAD	22,780 S.F.	-	473	
NEW ADDITION				
USE	AREA (SF)	SF/PERSON	LOAD	
ASSEMBLY CONCENTRATED	-	7 NET	-	
ASSEMBLY UNCONCENTRATED	-	15 NET	-	
BUSINESS	-	100 GROSS	-	
SWIMMING POOLS (WATER SURFACE)	1,237 S.F.	50 GROSS	25	
SWIMMING POOLS (DECK)	1,842 S.F.	30 GROSS	55	
STORAGE/MECHANICAL	488 S.F.	500 GROSS	1	
EXERCISE ROOMS WITH EQUIPMENT	-	50 GROSS	-	
EXERCISE ROOMS WITHOUT EQUIPMENT	-	15 GROSS	-	
TOTAL LOAD	3,388 S.F.	-	81	



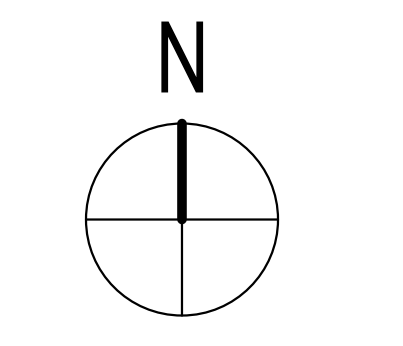
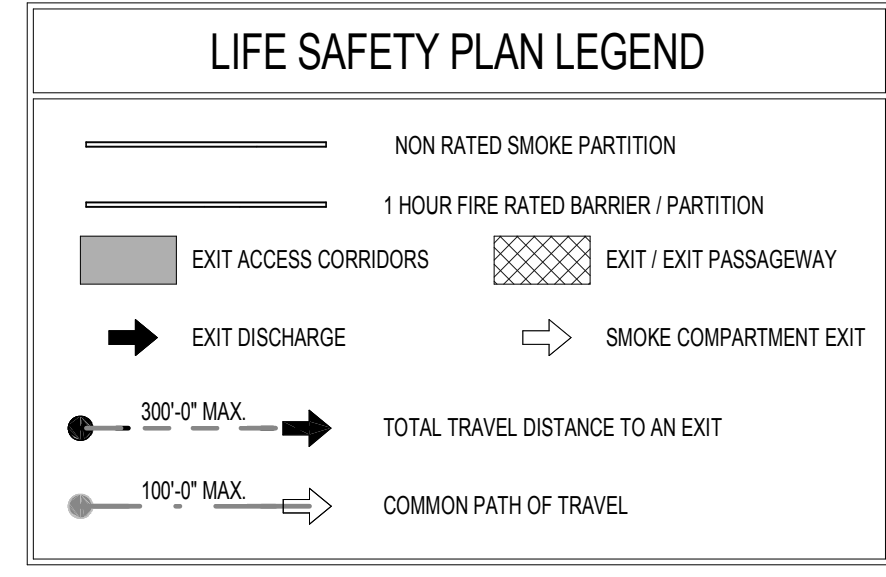
F5 BASEMENT OCCUPANCY PLAN  
1/16" = 1'-0"



CODE REQUIREMENTS FOR RENOVATION			
APPLICABLE CODES:		ABAS INCLUDING VA SUPPLEMENT, BARRIER FREE DESIGN GUIDE PG-18-13	
NFPA 101 LIFE SAFETY CODE 2012		BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI 318	
INTERNATIONAL BUILDING CODE 2012		AISC MANUAL OF STEEL CONSTRUCTION, LOAD AND RESISTANCE FACTOR DESIGN SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS.	
NFPA NATIONAL FIRE CODES WITH THE EXCEPTION OF NFPA 5000 AND NFPA 900		THE PROVISIONS FOR CONSTRUCTION AND SAFETY SIGNS, STATED IN THE GENERAL REQUIREMENTS SECTION 01010 OF THE VA MASTER CONSTRUCTION SPECIFICATION	
OSHA STANDARDS		VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY - ASHRAE STANDARD 62-1-2004	
VA SEISMIC DESIGN REQUIREMENTS, H-18-8		SAFETY STANDARD FOR REFRIGERATION SYSTEMS - ASHRAE STANDARD 15-2007	
NATIONAL ELECTRICAL CODE		ASHRAE STANDARD 90.1-2007 ENERGY STANDARD FOR BUILDINGS EXCEPT LOW RISE RESIDENTIAL BUILDINGS	
ENERGY POLICY ACT 2005			
NATIONAL STANDARD PLUMBING CODE			
ASME BOILER AND PRESSURE VESSEL CODE			
ASME CODE FOR PRESSURE PIPING			
BUILDING CODE		NFPA 101	
BUILDING OCCUPANCY CLASSIFICATION		BUSINESS	
TYPE OF CONSTRUCTION		TYPE 2 (0.0.0)	
EXISTING BUILDING HEIGHT		1 STORY + BASEMENT	
EXISTING BUILDING AREA		25,281 S.F.	
PROJECT AREA		28,629 S.F.	
FIRE SUPPRESSION SYSTEM		NFPA 13 SPRINKLER SYSTEM	
SEISMIC / WIND REQUIREMENTS			
OCCUPANCY CATEGORY		N/A	
SEISMIC DESIGN CATEGORY		N/A	
WIND ZONE		N/A	
CORRIDOR WIDTH			
CORRIDOR SERVING 49 PEOPLE OR LESS		36 INCHES	
CORRIDORS SERVING 50 PEOPLE OR MORE		44 INCHES	
ALLOWABLE DEAD END CORRIDOR		50 FEET	
TRAVEL DISTANCE			
MAXIMUM ALLOWABLE TRAVEL DISTANCE		300 FEET	
COMMON PATH OF TRAVEL		100 FEET	
OCCUPANT		SEE SHEET G1003	
OCCUPANT LOAD			
EXIT			
(MINIMUM) NUMBER OF EXITS REQUIRED		2 REQUIRED (<500 OCCUPANT) 3 REQUIRED (501-1000 OCCUPANT) 4 REQUIRED (1001-1000 OCCUPANT)	
EXIT CAPACITY		SEE SHEET G1003	
(MINIMUM) STAIR, DOOR AND CORRIDOR WIDTH		36" / 0.3 = 320 (EXISTING STAIR) 36" / 0.2 = 360	
CORRIDOR FIRE-RESISTANT RATING		N/A	
		NON-RATED (38.3.6.1c)	
INTERIOR FINISHES			
INTERIOR WALL AND CEILING FINISH REQUIREMENTS		EXIT	CLASS A OR B
INTERIOR FLOOR FINISH REQUIREMENTS		CORRIDORS	CLASS A OR B
		ROOMS	CLASS A OR B
		CLASS A OR B	

FIRE RATINGS		
NON-LOADBEARING WALLS AND PARTITIONS	HOURS	UL DESIGN #
FIRE WALLS (705)	2	N/A
EXIT ENCLOSURES (706.3.2 / 1020.1)	1	#U465U1419
EXITS PASSAGEWAY (706.3.3 / 1021.1)	1	N/A
HORIZONTAL EXITS (706.3.4 / 1022.1)	2	N/A
INCIDENTAL USE AREAS (706.3.6 / 508.2)	1	#U465U1419
OCCUPANCIES SEPARATION (706.3.8 / 508.3.2)	2	N/A
FIRE PARTITIONS (708)	1	N/A
SMOKE BARRIERS (709)	1	N/A
SHAFT ENCLOSURES (707.4)	1	#U465U1415
CORRIDOR WALLS (708.3 / 1017.1)	0	N/A

GENERAL NOTES:  
1) ALL RATED INTERIOR PARTITION SHOULD BE CONSTRUCTED IN ACCORDANCE WITH THE RATED PARTITION SCHEDULE UNLESS NOTED OTHERWISE ON THE FLOOR PLANS  
2) CONTRACTOR TO PATCH AND REPAIR ALL NEW AND EXISTING FIREPROOFING AFTER INSTALLATION OF NEW WORK AS REQUIRED TO MAINTAIN REQUIRED FIRE RATING. CONTRACTOR TO USE MATERIALS COMPATIBLE WITH EXISTING FIREPROOFING FOR PATCH WORK.



FULLY SPRINKLERED  
NOTE: SEE SHEET AE-002 FOR DEDUCT ALTERNATES ISSUED FOR BID

Revisions

Date

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PROJECT MANAGER:

Project Number  
3627

Scale  
As indicated

Drawing Title  
FIRST FLOOR LIFE SAFETY PLAN

Project Title  
RENOVATE BUILDING 69

VA Project Number  
542-CSI-203

Building Number  
69

Office of Facilities Management

Approved: Project Director

Location  
1400 Black Horse Hill, Coatesville, PA

Date  
03-29-13

Checked  
TN

Drawn  
BG

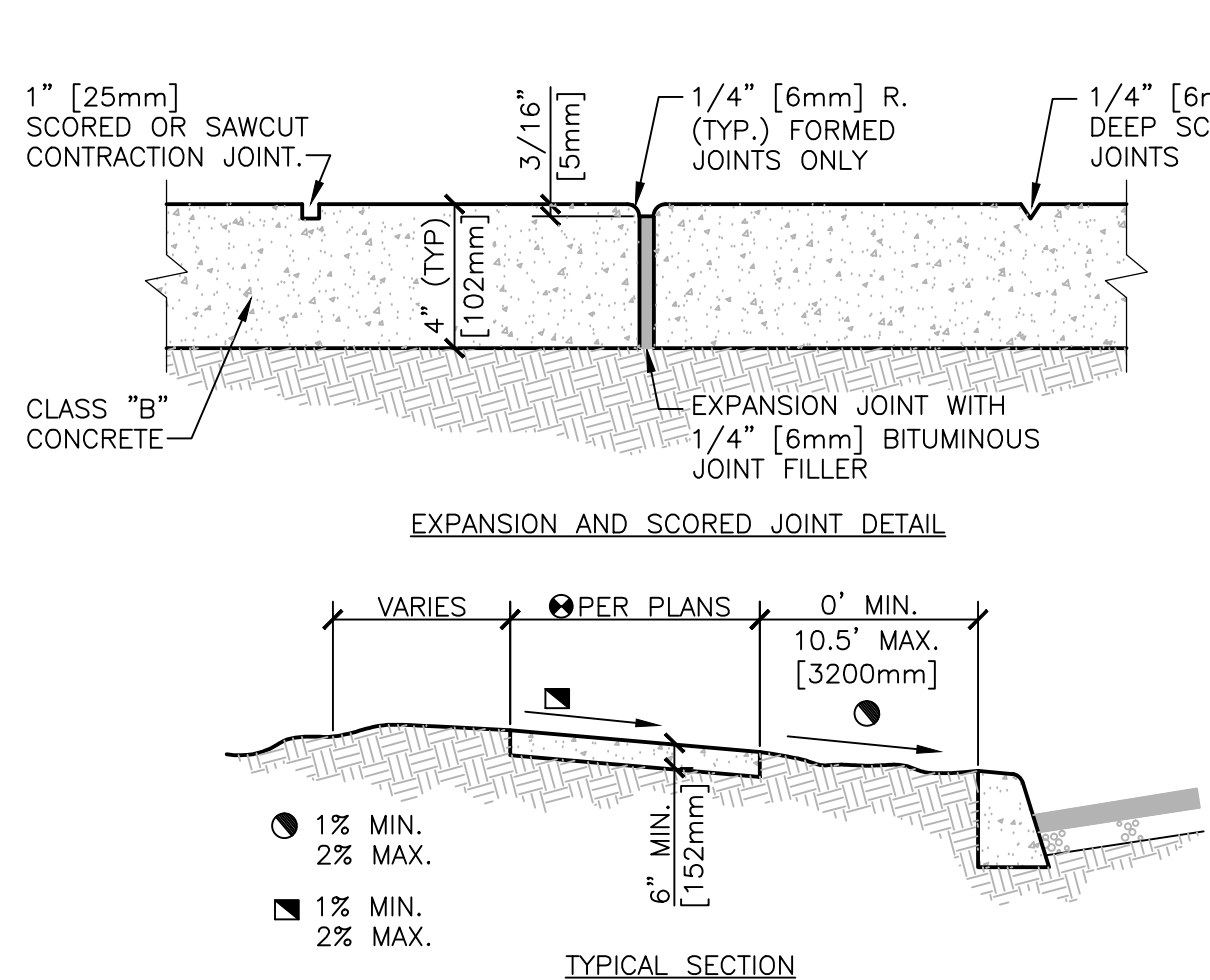
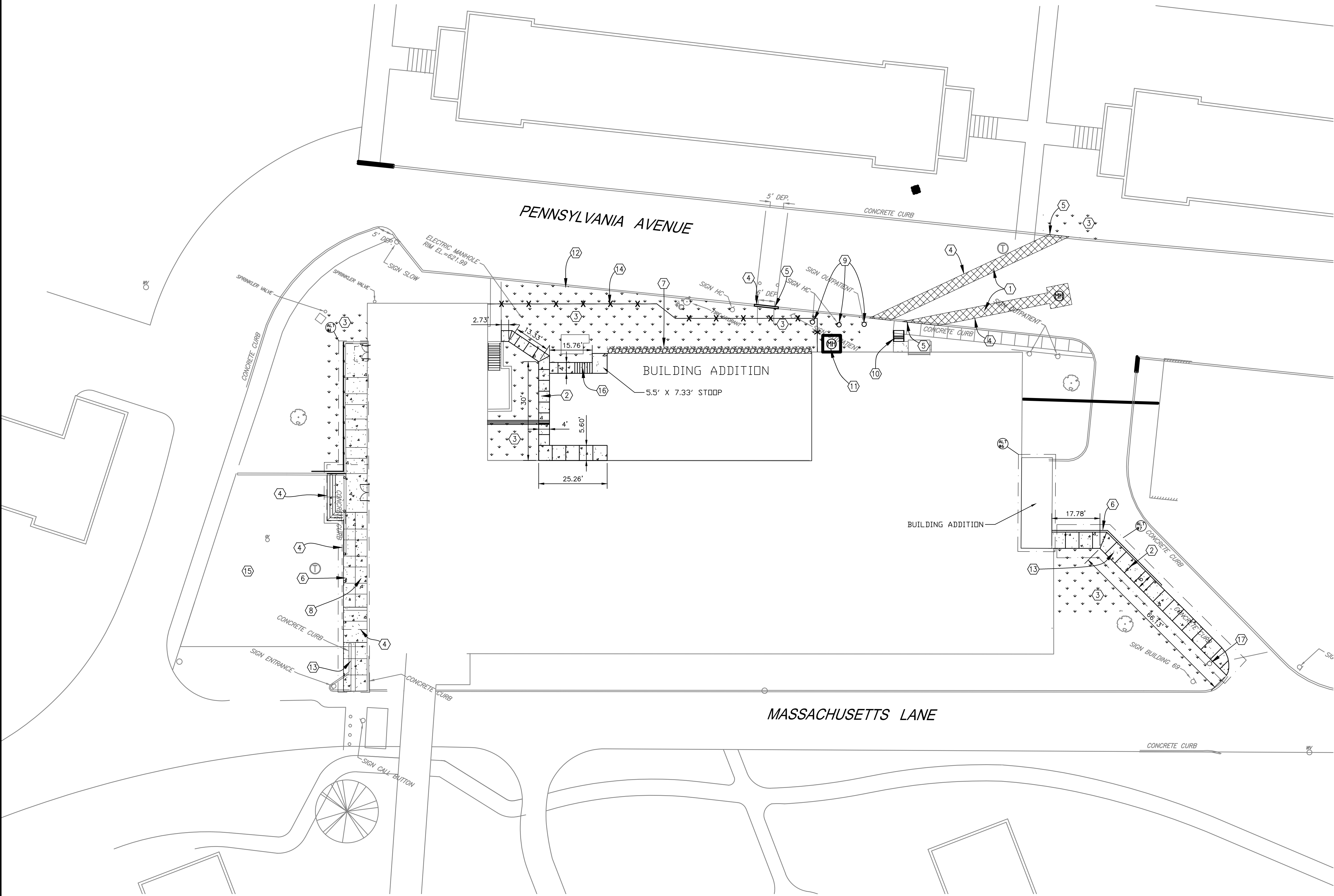
Drawing Number  
G1003

Dwg. 04 of 86

Department of Veterans Affairs

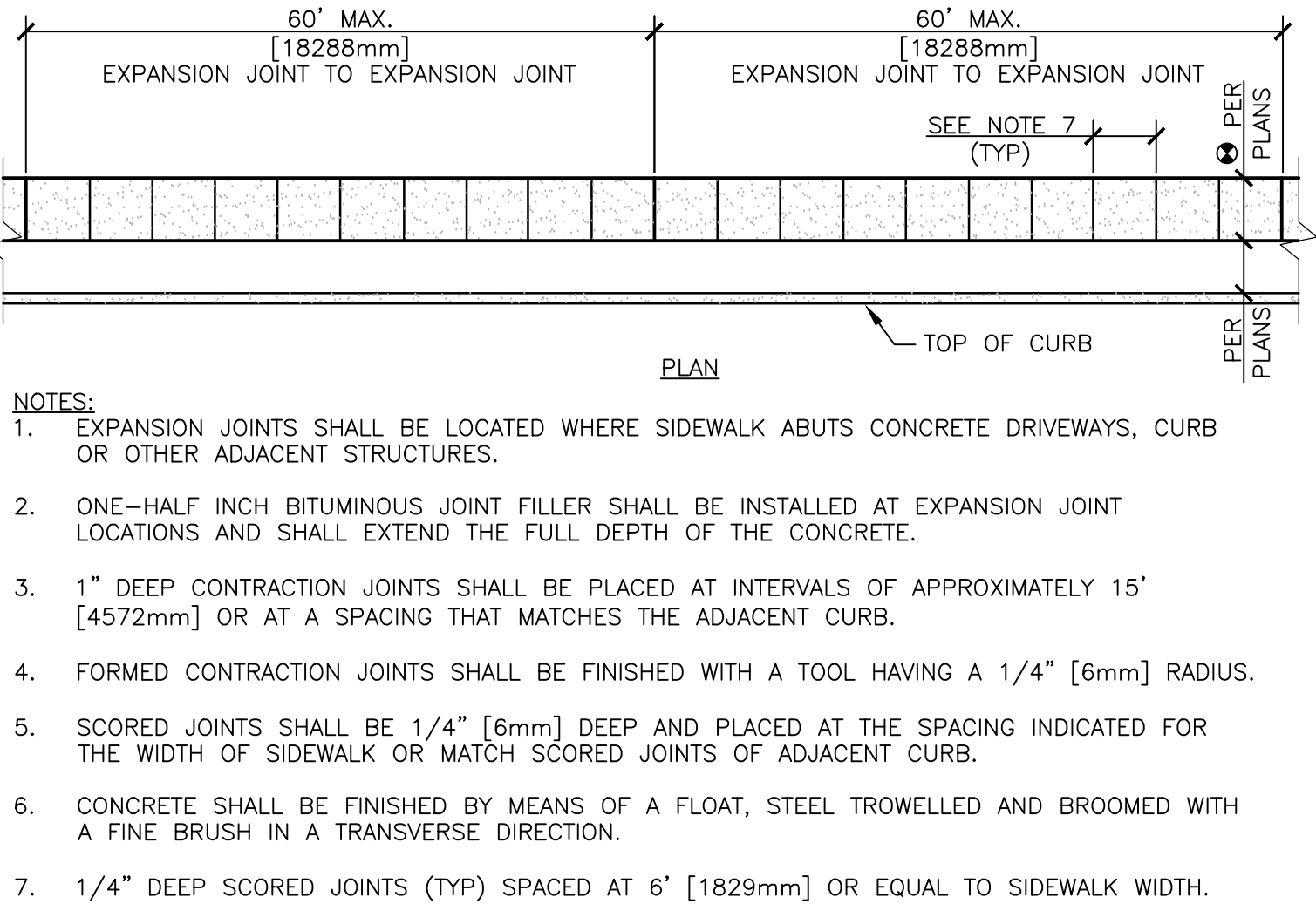


three inches = one foot  
one and one half inches = one foot  
one inch = one foot  
three quarters inch = one foot  
one half inch = one foot  
three eighths inch = one foot  
one quarter inch = one foot  
one eighth inch = one foot



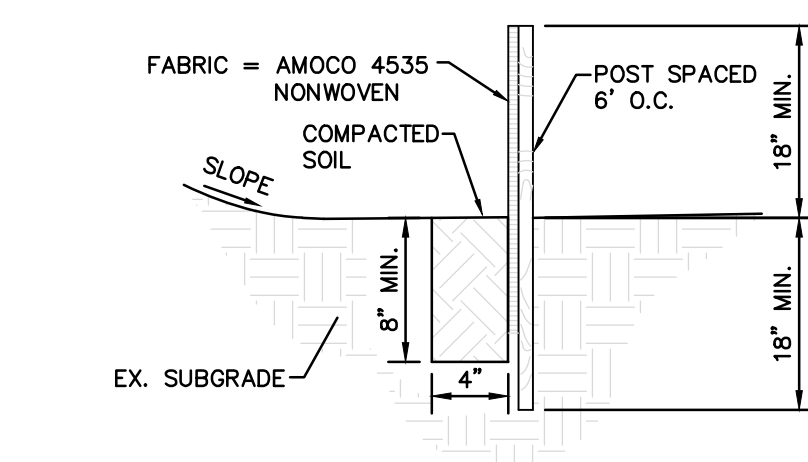
### 3 CONCRETE SIDEWALK

NTS



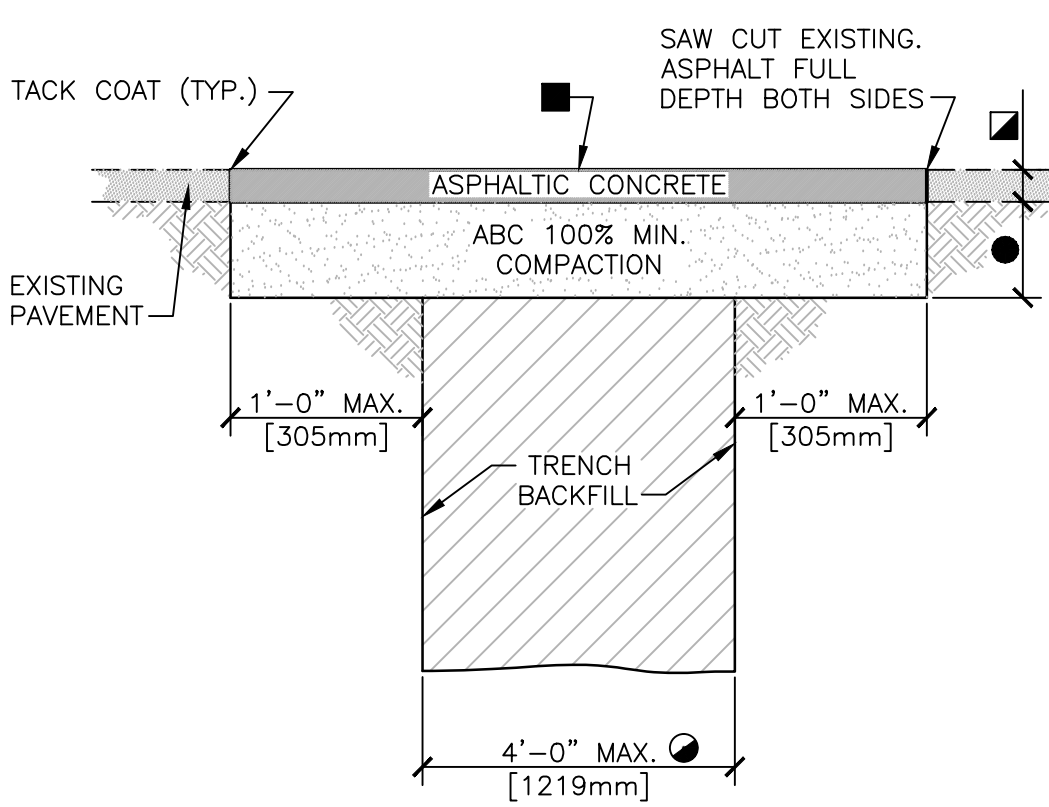
### 4 FULL DEPTH ASPHALT PAVEMENT DETAIL

NTS



### 1 SEDIMENT CONTROL FENCE

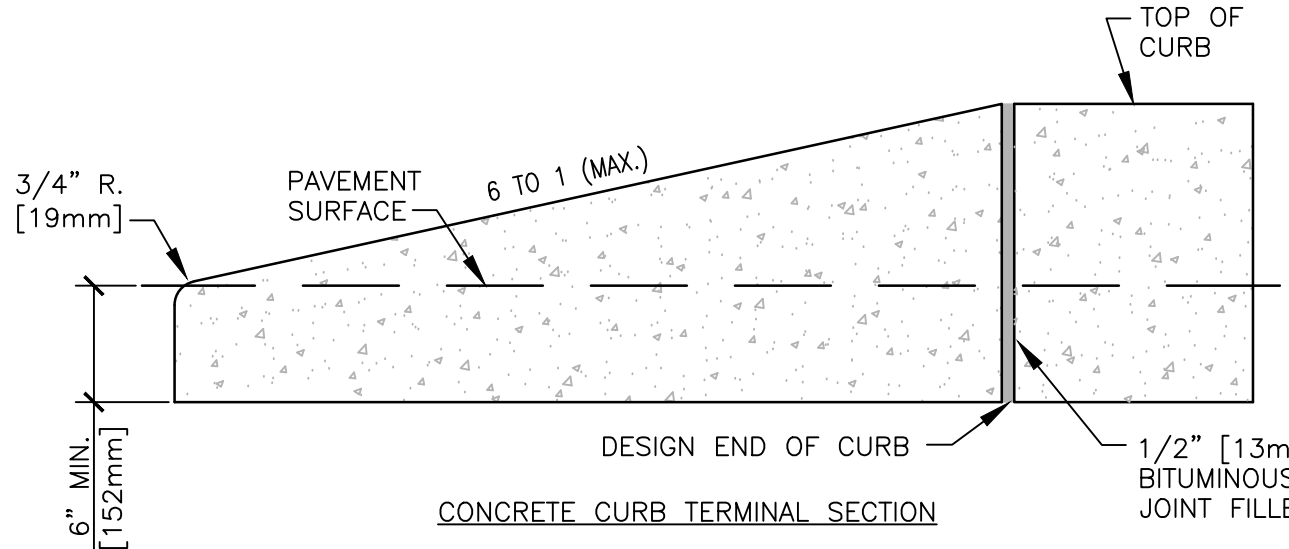
NTS



- FOR TRENCH WIDTHS EXCEEDING 4' [1219mm] REFER TO VA STANDARD DETAIL 32 12 16-02 "TYPE 2 UTILITY TRENCH PATCH". FOR TRENCH WHERE PORTLAND CEMENT CONCRETE (PCC) PAVEMENT EXISTS, REFER TO 32 12 16-03 "TYPE 3 UTILITY TRENCH PATCH".
  - 2" [50mm] MINIMUM OR THICKNESS OF EXISTING PAVEMENT WHICHEVER IS GREATER.
  - BITUMINOUS SURFACE TREATMENT (CHIPSEAL) REQUIRED ONLY FOR LONGITUDINAL TRENCHES WITH WIDTHS GREATER THAN 6' [1829mm].
  - 4" [100mm] MINIMUM ABC OR THICKNESS OF EXISTING GRANULAR BASE COURSE MATERIALS (E.G. ABC & SELECT MATERIAL) WHICHEVER IS GREATER.
- REFER TO VA STANDARD DETAIL 32 12 16-04 "UTILITY TRENCH PAVEMENT PATCH NOTES" FOR ADDITIONAL INFORMATION.

### 2 TYPE 1 UTILITY TRENCH PATCH

NTS



- NOTES:
- ALL CONCRETE CURBS AND TRANSITIONS, SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI. [4572mm].
  - MAXIMUM SPACING ON SCORED JOINTS SHALL BE 15' [4572mm].
  - 1/2" [13mm] THICK EXPANSION JOINTS SHALL BE LOCATED AT TANGENT POINTS IN CURB RETURNS, TRANSITIONS, AND AT A MAXIMUM OF 60' [1828.8cm] INTERVALS. EXPANSION MATERIAL SHALL ALSO BE PLACED BETWEEN CURBS AND ADJACENT STRUCTURES, SIDEWALKS, DRIVEWAYS AND CURB ACCESS RAMPS. THE 1/2" [13mm] JOINT FILLER SHALL EXTEND THE FULL DEPTH OF THE CONCRETE.
  - CONCRETE SHALL BE FINISHED WITH A STEEL TROWEL FOLLOWED BY BRUSHING WITH A FINE BRUSH ALONG THE LENGTH OF THE CURB OR CURB AND GUTTER.
  - SINGLE CURB MAY BE CONSTRUCTED BY THE USE OF FORMS OR MAY BE SLIP FORMED.
  - ALL EXPOSED EDGES AND HAND TOOLED JOINTS SHALL BE FINISHED WITH A TOOL HAVING A 1/4" [6mm] RADIUS UNLESS A LARGER RADIUS IS INDICATED BY THE APPLICABLE STANDARD DETAIL OR PROJECT PLANS.
  - FOR REVEALS OF 6" [152mm] TO LESS THAN 8" [203mm].
  - FOR REVEALS OF 8" [203mm] TO 10" [254mm].

### 5 CONCRETE CURB AND TERMINAL SECTION

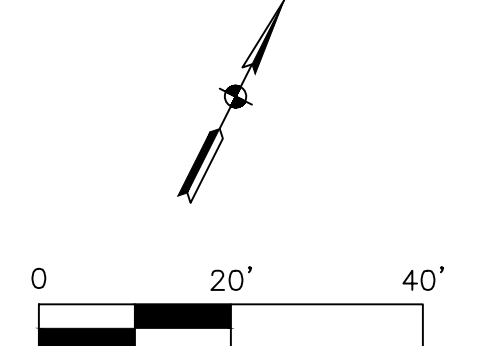
NTS

- CONTRACTOR TO LEGALLY DISPOSE OF OFF SITE ALL EXISTING ASPHALT, ROCK, AND MATERIAL REMOVED.
- CONDUCT DEMOLITION AND CONSTRUCTION ACTIVITIES IN SUCH A MANNER TO PROVIDE MINIMAL TRAFFIC DISRUPTIONS.
- ALL EXISTING UTILITIES TO STAY IN SERVICE DURING CONSTRUCTION. COORDINATE WITH OWNER.
- ALL DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR THE BACK OF CURB.
- FIELD VERIFY ALL DIMENSIONS ON THE SITE PRIOR TO CONSTRUCTION AND IDENTIFY DISCREPANCIES TO THE ENGINEER.
- PROVIDE POSITIVE DRAINAGE IN ALL AREAS WITHOUT PONDING AFTER INSTALLATION OF NEW ASPHALT. CONTRACTOR TO TEST AND CORRECT ANY "BIRD BATH" CONDITIONS.
- CONTRACTOR TO COMPLY WITH ALL LOCAL AND STATE LAWS AND REGULATIONS.
- NOTIFY ALL UTILITIES 72 HOURS PRIOR TO CONSTRUCTION START TO VERIFY UTILITIES THAT MIGHT BE PRESENT ON SITE.
- CAUTION!! THERE MAY BE EXISTING UNDERGROUND UTILITIES OF WHICH THERE IS NO ABOVE GROUND EVIDENCE OBSERVED. EXACT LOCATION OR UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CALL PENNSYLVANIA ONE CALL - DIAL 811.

- ASPHALT REMOVAL AND REPAIR
- CONCRETE SIDEWALK
- SEEDING
- SAW CUT PAVEMENT
- CONCRETE CURB
- CONCRETE WALL (SEE STRUCTURAL PLANS FOR DESIGN)
- 2' WIDE STONE DRAINAGE BED
- ADA RAMP AND SIDEWALK (SEE ARCHITECTURAL & STRUCTURAL FOR DIMENSIONING AND DETAILS)
- REMOVE AND REINSTALL SIGN
- REMOVE AND REINSTALL STAIRS
- SILT SACK INLET PROTECTION
- SEDIMENT CONTROL FENCE
- SAWCUT AND REMOVE CURB & PAVEMENT FOR NEW SIDEWALK
- CHAIN LINK CONSTRUCTION FENCE, 7 FT
- EXISTING STRIPING TO BE REMOVED BY GRINDING, RESTRIPE PER THE VA'S COR DIRECTION
- SEE ARCHITECTURAL PLANS FOR STAIR DETAILS
- RELOCATED EXISTING STOP SIGN

NOTE: EXISTING UTILITY INFORMATION SHOWN ON PLAN WAS DERIVED FROM A COMBINATION OF SURVEY AND EXISTING DRAWINGS. CONTRACTOR TO FIELD VERIFY ALL RELEVANT UTILITY LOCATIONS.

TOPOGRAPHIC SURVEY PERFORMED BY HOWELL KLINE SURVEYING, LLC.

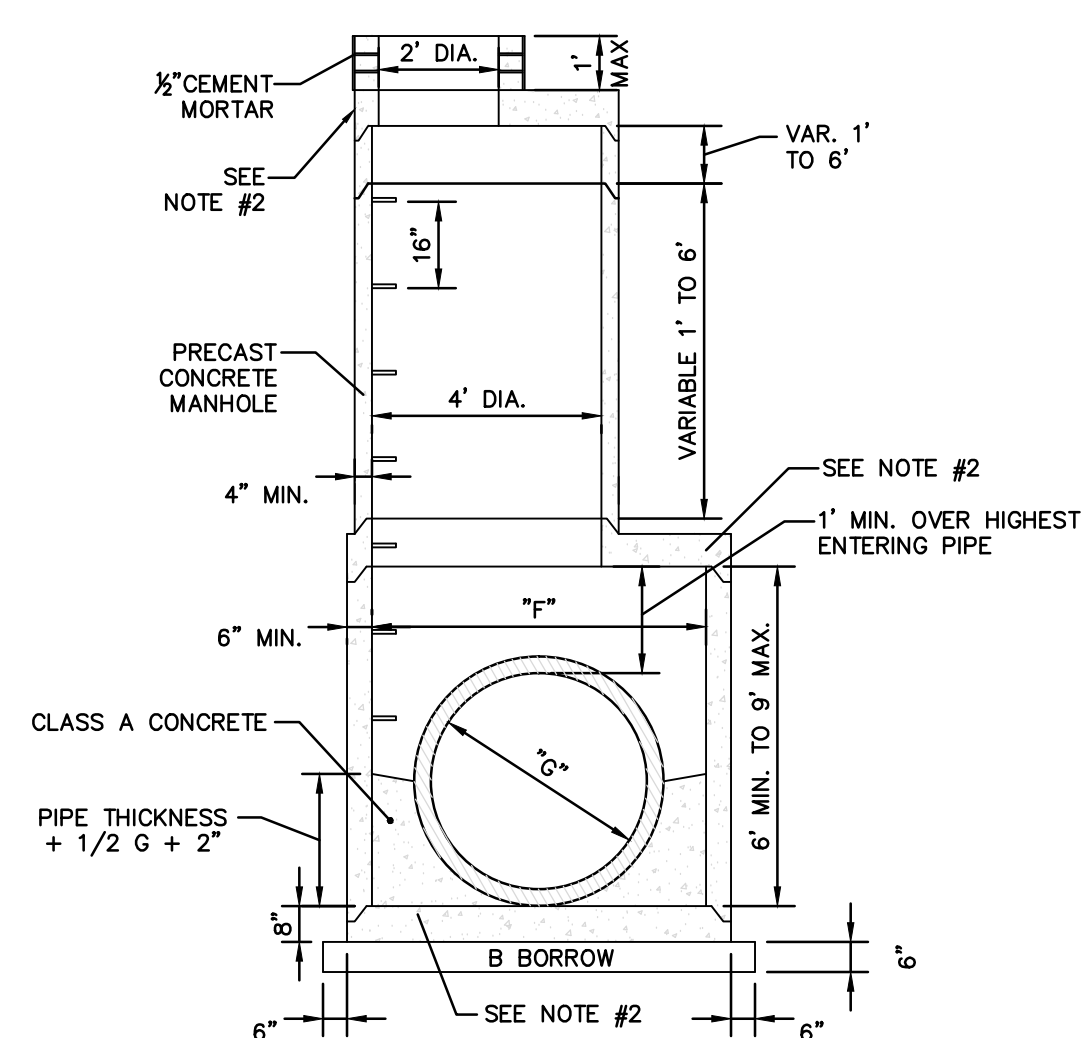
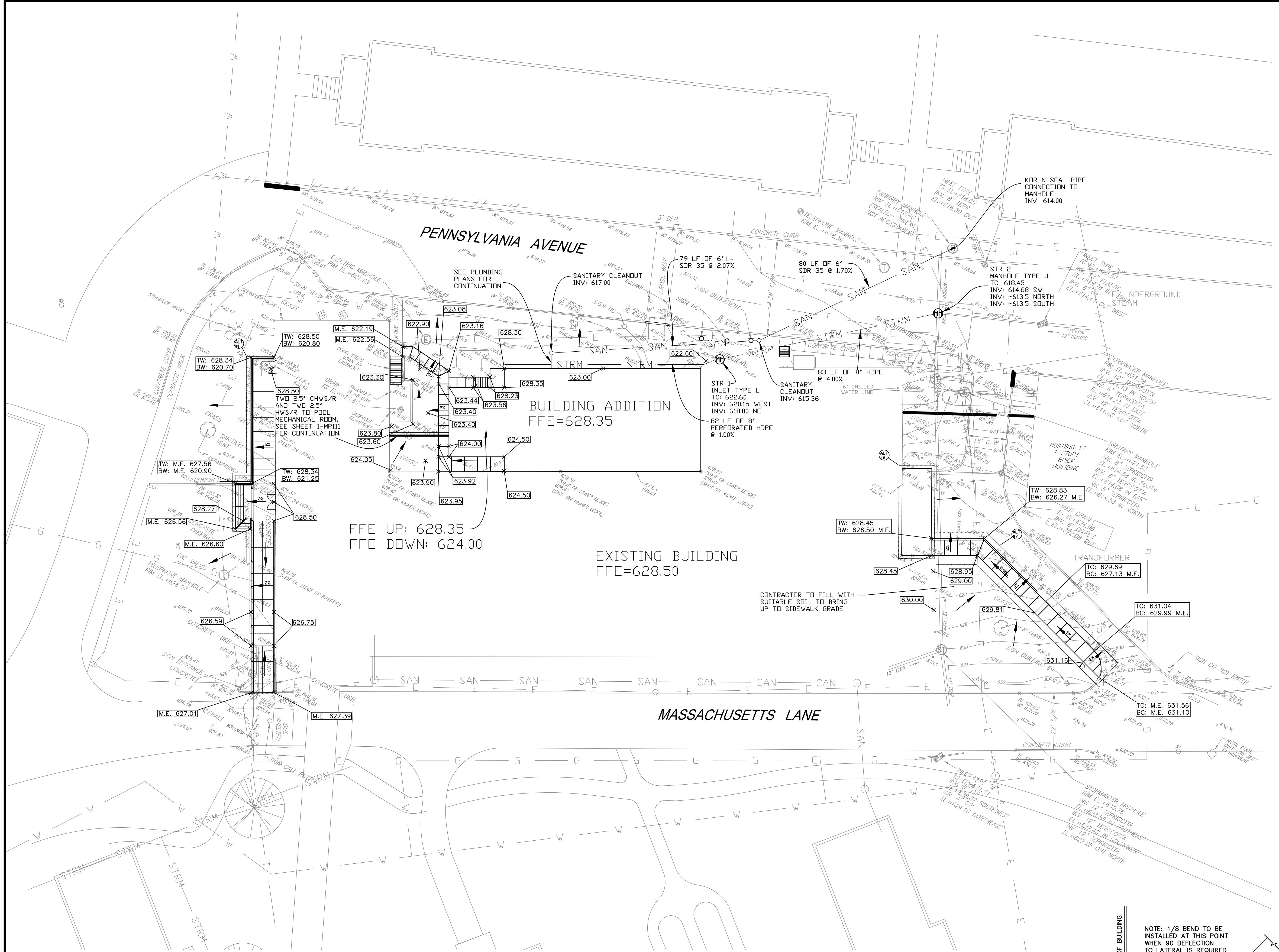


FULLY SPRINKLERED  
ISSUED FOR BID

<div>Revisions</div> <div>Date</div>		CONSULTANTS:										PROJECT MANAGER:		Project Number 3627	Scale 1" = 20'	Drawing Title SITE PLAN		Project Title RENOVATE BUILDING 69		VA Project Number 542-CSI-203		Office of Facilities Management	
		Project Manager BRAY MOONEY CONSULTING		Architect ARRAY HEALTHCARE FACILITIES SOLUTIONS		Structural Engineer WZG, STRUCTURAL CONSULTING ENGINEERS		MEP/FP Engineer APOGEE CONSULTING GROUP		Civil Engineer GUIDON DESIGN		Fire Protection Consultant HARRINGTON GROUP		Cost Estimator BRAY MOONEY CONSULTING		Aquatic Consultant ATLANTIC AQUATIC ENGINEERING		Abatement Consultant COLDON CORPORATION		Building Number 69			
		410 E. 21 STREET CHESTER, PA, 19013 Tel (610) 872-3716		2320 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA, 19406 Tel (610) 270-6599		180 W. RIDGE PIKE LIMERICK, PA, 19468 Tel (214) 329-9559		7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC 27606 Tel (919) 856-7420		2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel (317) 800-6388		7508 E. INDEPENDENCE STREET BLVD., SUITE 116 CHARLOTTE, NC 28227 Tel (704) 551-9077		410 E. 21 STREET CHESTER, PA, 19013 Tel (610) 872-3716		1823 DEEP RUN ROAD PIPERSVILLE, PA, 18947 Tel (215) 796-0409		1617 JPK Blvd., SUITE 1706 PHILADELPHIA, PA, 19103 Tel (215) 496-9237		Location 1400 Black Horse Hill, Coatesville, PA		Drawing Number CS101	
																		Dwg. 5 of 86		 Department of Veterans Affairs			



three inches = one foot  
one and one half inches = one foot  
one inch = one foot  
three quarters inch = one foot  
one half inch = one foot  
one quarter inch = one foot  
one eighth inch = one foot  
one quarter inch = one foot  
one eighth inch = one foot



MANHOLE PIPE SIZES				
TYPE	G	F	MAXIMUM PIPE SIZE RT. 4 TO MAINLINE	MAXIMUM PIPE SIZE FOR MAINLINE
H	2' TO 3'	5'	2.5'	3'
J	2' TO 3'	5'	2.5'	3'
K	3' TO 4'	6'	3'	4'
L	4' TO 4.5'	8'	4'	4.5'
M	4.5' TO 6'	8.5'	5.5'	6'
N	6' TO 7'	9'	6'	7'

NOTES:  
1. DROP PIPE MAY BE USED WITH MANHOLES TYPE H THROUGH TYPE N AND SHALL BE REFERRED TO AS DROP MANHOLE TYPE H THROUGH TYPE N.  
2. THE CONTRACTOR WILL BE PERMITTED TO SUBSTITUTE MANHOLES TYPE C THROUGH TYPE F FOR MANHOLES TYPE H THROUGH TYPE N FOR COMPARABLE PIPE SIZES.

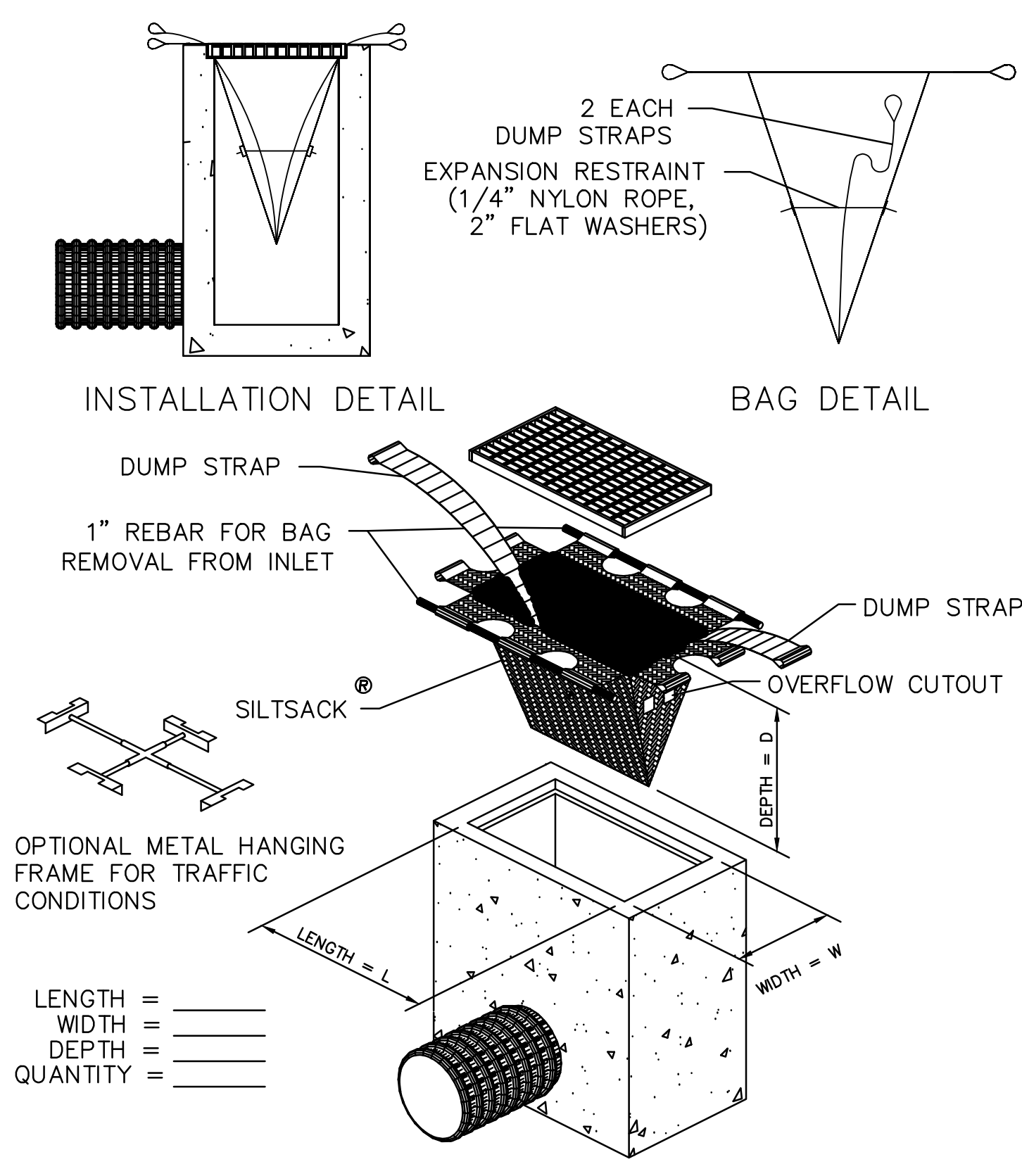
6 MANHOLE TYPE J,K,L,M & N  
NTS

- CONTRACTOR TO REMOVE AND LEGALLY DISPOSE OF OFF SITE ALL EXISTING ASPHALT, ROCK, AND MATERIAL REMOVED.
- CONDUCT DEMOLITION AND CONSTRUCTION ACTIVITIES IN SUCH A MANNER TO PROVIDE MINIMUM TRAFFIC DISRUPTIONS.
- MAINTAIN ALL EXISTING UTILITIES TO STAY IN SERVICE DURING CONSTRUCTION.
- FIELD VERIFY ALL DIMENSIONS ON THE SITE PRIOR TO CONSTRUCTION AND IDENTIFY DISCREPANCIES TO THE ENGINEER.
- CONTRACTOR TO COMPLY WITH ALL LOCAL AND STATE LAWS AND REGULATIONS.
- NOTIFY ALL UTILITIES 72 HOURS PRIOR TO CONSTRUCTION START TO VERIFY UTILITIES THAT MIGHT BE PRESENT ON SITE.
- CAUTION!! THERE MAY BE EXISTING UNDERGROUND UTILITIES OF WHICH THERE IS NO ABOVE GROUND EVIDENCE OBSERVED. EXACT LOCATION OR UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CALL PENNSYLVANIA ONE CALL - DIAL 811.
- FOR VIEWING CLARITY OF THESE CONSTRUCTION PLANS, THE PIPES OR STRUCTURES MAY NOT BE DRAWN TO SCALE.

— DRAINAGE DIRECTION FLOW  
— M.E. MATCH EXISTING GRADE

SITE SYMBOLS - UTILITIES

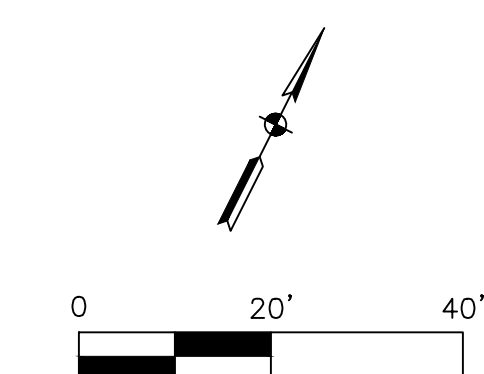
- GAS — GAS LINE
- E — ELECTRIC LINE
- W — WATER LINE
- STRM — STORM SEWER
- T — TELEPHONE LINE
- SAN — SANITARY SEWER
- 90LB PRESSURE STEAM
- 60LB PRESSURE STEAM
- FUEL — FUEL LINE
- HYDRANT, FIRE
- SANITARY MANHOLE
- ELECTRICAL MANHOLE
- STORM STRUCTURE
- LIGHT POLE
- SWITCH
- TRANSFORMER
- STEAM VAULT
- GAS/WATER VALVE
- PC PUMPED CONDENSATE




II SILTSACK W/ OVERFLOW OUTLET  
NTS

NOTE: EXISTING UTILITY INFORMATION SHOWN ON PLAN WAS DERIVED FROM A COMBINATION OF SURVEY AND EXISTING DRAWINGS. CONTRACTOR TO FIELD VERIFY ALL RELEVANT UTILITY LOCATIONS.

TOPOGRAPHIC SURVEY PERFORMED BY HOWELL KLINE SURVEYING, LLC.



FULLY SPRINKLERED  
ISSUED FOR BID

CONSULTANTS:										PROJECT MANAGER:	Project Number 3627	Scale 1" = 20'	Drawing Title GRADING & UTILITY PLAN	Project Title RENOVATE BUILDING 69	VA Project Number 542-CSI-203	Office of Facilities Management
Project Manager BRAY MOONEY CONSULTING	Architect ARRAY HEALTHCARE FACILITIES SOLUTIONS	Structural Engineer WZG, STRUCTURAL CONSULTING ENGINEERS	ME/PEP Engineer APOGEE CONSULTING GROUP	Civil Engineer GUIDON DESIGN	Fire Protection Consultant HARRINGTON GROUP	Cost Estimator BRAY MOONEY CONSULTING	Aquatic Consultant ATLANTIC AQUATIC ENGINEERING	Abatement Consultant COLDON CORPORATION		Approved: Project Director	Location 1400 Black Horse Hill, Coatesville, PA	Building Number 69	Drawing Number CS102			
410 E. 21 STREET CHESTER, PA. 19013 Tel: (610) 872-3716	2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA. 19406 Tel: (610) 270-0599	180 W. RIDGE PIKE LIMERICK, PA. 19468 Tel: (214) 329-5559	7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC. 27606 Tel: (919) 858-7423	2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 800-6388	7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC. 28227 Tel: (704) 531-9077	410 E. 21 STREET CHESTER, PA. 19013 Tel: (610) 872-3716	1823 DEEP RUN ROAD PIPERSVILLE, PA. 18947 Tel: (215) 796-0409	1617 JFK Blvd., SUITE 1706 PHILADELPHIA, PA. 19103 Tel: (215) 496-9237				Date 03-29-13	Checked SLP	Drawn CMB	Dwg. 6 of 86	
Revisions		Date														



DESIGN CRITERIA NOTES:

1. THE STRUCTURAL DESIGN IS IN ACCORDANCE WITH THE PROVISIONS OF THE INTERNATIONAL BUILDING CODE, 2012 EDITION.
2. DESIGN LOADS ARE AS LISTED BELOW.
- LIVE LOADS:
- |                             |         |
|-----------------------------|---------|
| PRIVATE ROOMS & WARDS       | 40 PSF  |
| RADIOLOGY, PHYSICAL THERAPY | 75 PSF  |
| PUBLIC AREAS                | 100 PSF |
| MECHANICAL ROOMS            | 150 PSF |
| OR EQUIP. WT.               |         |
- PARTITIONS IN NON-PUBLIC AREAS
- |        |
|--------|
| 15 PSF |
|--------|
- ROOF
- |        |
|--------|
| 20 PSF |
|--------|
- SUPERIMPOSED DEAD LOADS:
- |  |                    |
|--|--------------------|
| MECHANICAL, ELECTRICAL AND CEILING FINISHES WHERE SHOWN ON ARCHITECTURAL | 10 PSF AS REQUIRED |
|--|--------------------|
3. LOADINGS FOR MECHANICAL ROOMS ARE BASED ON WEIGHTS OF ASSUMED EQUIPMENT AS INDICATED BY THE MECHANICAL DOCUMENTS (INCLUDING THE WEIGHT OF CONCRETE PADS, WHERE INDICATED). ANY CHANGES IN TYPE, SIZE, OR NUMBER OF PIECES OF EQUIPMENT SHALL BE REPORTED TO THE ARCHITECT FOR VERIFICATION OF THE ADEQUACY OF SUPPORTING MEMBERS PRIOR TO THE PLACEMENT OF SUCH EQUIPMENT.
4. BASIC DESIGN SNOW LOADS ARE IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE, 2012.
- |                                    |        |
|------------------------------------|--------|
| GROUND SNOW LOAD, $P_g$            | 30 PSF |
| FLAT-ROOF SNOW LOAD, $P_f$         | 28 PSF |
| SNOW EXPOSURE FACTOR, $C_e$        | 1.0    |
| SNOW LOAD IMPORTANCE FACTOR, $I_s$ | 1.1    |
| THERMAL FACTOR, $C_t$              | 1.2    |
5. BASIC DESIGN WIND LOADS ARE IN ACCORDANCE WITH ASCE 7-08. DESIGN ASSUMPTIONS ARE AS FOLLOW:
- MEAN RECURRENT INTERVAL = 50 YEARS  
BASIC WIND SPEED = 120 MPH  
EXPOSURE TYPE FOR EFFECTIVE VELOCITY PRESSURE = B  
RISK CATEGORY = II
6. SEISMIC DESIGN - THE STRUCTURE HAS BEEN DESIGNED ACCORDING TO THE INTERNATIONAL BUILDING CODE, 2012.
- |   |       |
|---|-------|
| SEISMIC IMPORTANCE FACTOR, $I_p$        | 1.25  |
| SEISMIC USE GROUP                       | III   |
| 0.2 SECOND SPECTRAL ACCELERATION, $S_s$ | 0.26g |
| 1.0 SECOND SPECTRAL ACCELERATION, $S_1$ | 0.07g |
| SITE CLASS                              | D     |
| SEISMIC DESIGN CATEGORY                 | C     |

FOUNDATION NOTES:

1. SPREAD FOOTINGS ARE DESIGNED FOR THE ALLOWABLE NET SOIL BEARING PRESSURE OF 3000 PSF. GENERAL CONTRACTOR TO PROVIDE GEOTECHNICAL REPORT PER SPECIFICATIONS TO VERIFY DESIGN ASSUMPTIONS.
2. PROVIDE CRACK CONTROL JOINTS IN SLABS ON-GRADE AS INDICATED BY THE SPECIFICATIONS.
3. DO NOT ALLOW SURFACE WATER TO ACCUMULATE AND/OR POND IN EXCAVATIONS. TEMPORARY Dewatering SYSTEM TO BE USED DURING CONSTRUCTION WILL BE DESIGNED AND INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE RECOMMENDATIONS GIVEN IN THE GEOTECHNICAL REPORT AND THE REQUIREMENTS OF THE GOVERNING BUILDING CODE.

MISCELLANEOUS NOTES:

1. THE DETAILS DESIGNATED AS "TYPICAL DETAILS" APPLY GENERALLY TO THE DRAWINGS IN AREAS WHERE CONDITIONS ARE SIMILAR TO THOSE DESCRIBED IN THE DETAILS. UNLESS NOTED OTHERWISE.
2. ALL DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE SHOWN ON PLANS, SECTIONS, AND DETAILS. DO NOT SCALE THE DRAWINGS.
3. PRINCIPAL OPENINGS, CURBS, AND SLAB DEPRESSIONS ARE SHOWN ON THE DRAWINGS. SEE ARCHITECTURAL, MECH, ELEC, AND PLUMBING DRAWINGS FOR SLEEVES, CURBS, INSERTS, OTHER OPENINGS, AND SLAB DEPRESSIONS NOT SHOWN. THE CONTRACTOR SHALL PROVIDE FOR ALL OPENINGS, CURBS, AND SLAB DEPRESSIONS WHETHER SHOWN ON STRUCTURAL DRAWINGS OR NOT. SIZE AND LOCATION OF OPENINGS SHALL BE VERIFIED WITH THE MECHANICAL CONTRACTOR. ANY DEVIATION FROM OPENINGS SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE BROUGHT TO ENGINEER'S ATTENTION FOR APPROVAL PRIOR TO FABRICATION OR INSTALLATION OF STRUCTURAL MEMBERS.
4. THE CONTRACTOR SHALL COMPARE THE STRUCTURAL DRAWINGS WITH THE ARCH, MECH, ELEC, PLUMBING, AND CIVIL DRAWINGS TO CONFIRM ALL REQUIREMENTS OF THE WORK. REPORT ANY CONFLICT/DISCREPANCY BETWEEN THE DISCIPLINES TO THE ARCHITECT PRIOR TO FABRICATING OR INSTALLING STRUCTURAL ELEMENTS.
5. THE HORIZONTAL AND VERTICAL DIMENSIONS OF EXISTING STRUCTURES SHALL BE VERIFIED BEFORE WORK IS BEGUN. ANY VARIATION BETWEEN DIMENSIONS SHOWN AND EXISTING DIMENSIONS SHALL BE REPORTED TO THE ARCHITECT.
6. THE CONTRACTOR SHALL INSURE THAT CONSTRUCTION LOADS DO NOT EXCEED THE DESIGN LIVE LOADS INDICATED ON THE STRUCTURAL DRAWINGS AND THAT THESE LOADS ARE NOT PUT ON THE STRUCTURAL MEMBERS PRIOR TO THE TIME THAT THE CONCRETE REACHES THE PLACED DESIGN STRENGTH AND ALL FRAMING MEMBERS AND THEIR CONNECTIONS ARE IN PLACE.
7. PROVIDE CHAMFERS AS SPECIFIED AND/OR DETAILED ON THE ARCHITECTURAL DRAWINGS. CHAMFERS HAVE NOT BEEN SHOWN ON THE STRUCTURAL DRAWINGS.

CONCRETE NOTES:

- A. CAST IN PLACE CONCRETE:
1. CLASSES OF CONCRETE SHALL BE AS FOLLOWS:

CLASSES OF CONCRETE			
LOCATION	28 DAY $F_c$ (psi)	CONC. TYPE	MAX. NOM. COARSE AGG. SIZE
ALL CONC. U.N.O.	3,000	N.W.C.	1 1/2"
SLAB ON GRADE	3,500	N.W.C.	1 1/2"
PILASTER, WALLS	4,000	N.W.C.	1 1/2"
TOPPING SLABS	4,000	N.W.C.	3/4"

N.W.C. DENOTES NORMAL WEIGHT CONCRETE WITH A MAX. DRY DENSITY = 150 PCF

2. CONCRETE PROTECTION FOR REINFORCEMENT SHALL BE AS NOTED BELOW. SEE SECTION 7.7, ACI 318.1F-10R CONDITIONS NOT NOTED.

CONCRETE PROTECTION	
WALL FOOTINGS, COLUMN FOOTINGS, AND OTHER CONCRETE PLACED AGAINST SOIL	3"
WALLS	1" BACKFILLED SIDES 2" NON-BACKFILLED SIDES
SLABS ON-GRADE	3" BOTTOM (MINIMUM)
TOPPING SLABS	1" TOP 1.5" TOP

3. HORIZONTAL CONSTRUCTION JOINTS SHALL BE PERMITTED ONLY WHERE SHOWN ON THE STRUCTURAL DRAWINGS.

CONCRETE REINFORCEMENT NOTES:

REINFORCING STEEL

- a. CONCRETE REINFORCING BARS SHALL BE NEW DOMESTIC DEFORMED BILLET STEEL CONFORMING TO ASTM A615 GRADE 60, EXCEPT AS NOTED. FIELD BENT #3 DOWELS MAY BE ASTM A615, GRADE 40. REINFORCEMENT REQUIRED TO BE WELDED SHALL CONFORM TO ASTM A706, U.N.O.
- b. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185. THE FOLLOWING WELDED WIRE FABRIC SHALL BE USED FOR AREAS SPECIFIED BELOW. UNLESS NOTED OTHERWISE ON THE DRAWINGS:
- |   |                     |
|---|---------------------|
| 5 INCH SLAB ON-GRADE                                    | 6 X 6 - W2 X W2.9   |
| NON-STRUCTURAL, TYPIC SLABS                             | 6 X 6 - W1.4 X W1.4 |
| FOR ADDITIONAL W.W.F., IF ANY, SEE FLOOR FRAMING PLANS. |                     |
- c. HEADED STUDS AND DEFORMED BAR ANCHORS USED IN FABRICATION OF EMBEDDED ASSEMBLIES SHALL BE WELDED TO THOSE ASSEMBLIES USING A FULL FUSION PROCESS.
- d. REINFORCING BARS MAY BE SPLICED ONLY AS SHOWN ON THE DRAWINGS EXCEPT THAT REINFORCING DESIGNATED AS "CONTINUOUS" SHALL HAVE A CLASS "B" LAP SPICE (ACI 318-08, SECTION 12.15.1). LAP SPLICES OF CONTINUOUS REINFORCING SHALL BE MADE OVER SUPPORTS FOR BOTTOM BARS AND FOR INTERMEDIATE BARS AND AT MIDSPAN FOR TOP BARS. AT EXTERIOR SUPPORTS, TOP AND BOTTOM BARS SHALL BE HOOKED AND INTERMEDIATE BARS SHALL EXTEND TO WITHIN 2" OF EXTERIOR FACE.
- e. HORIZONTAL WALL REINFORCEMENT SHALL BE CONTINUOUS AND SHALL HAVE 90 DEGREE BENDS AND EXTENSIONS AT CORNERS AND INTERSECTIONS AS SHOWN ON TYPICAL WALL CORNER BAR PLACING DETAILS.
- f. LAPS IN WELDED WIRE FABRIC SHALL BE TWO MESH AT SPLICES.
- g. PROVIDE STANDARD BAR CHAIRS WITH PROTECTIVE TIPS AND SPACERS SPACED AS REQUIRED TO PROVIDE SPECIFIED CONCRETE PROTECTION FOR REINFORCEMENT BUT NOT TO EXCEED 3" ON CENTER FOR SLABS, BEAMS, AND GRADE BEAMS. PLACE BAR CHAIRS LONGITUINALLY IN BEAMS DIRECTLY BELOW THE STIRRUPS.

STEEL NOTES:

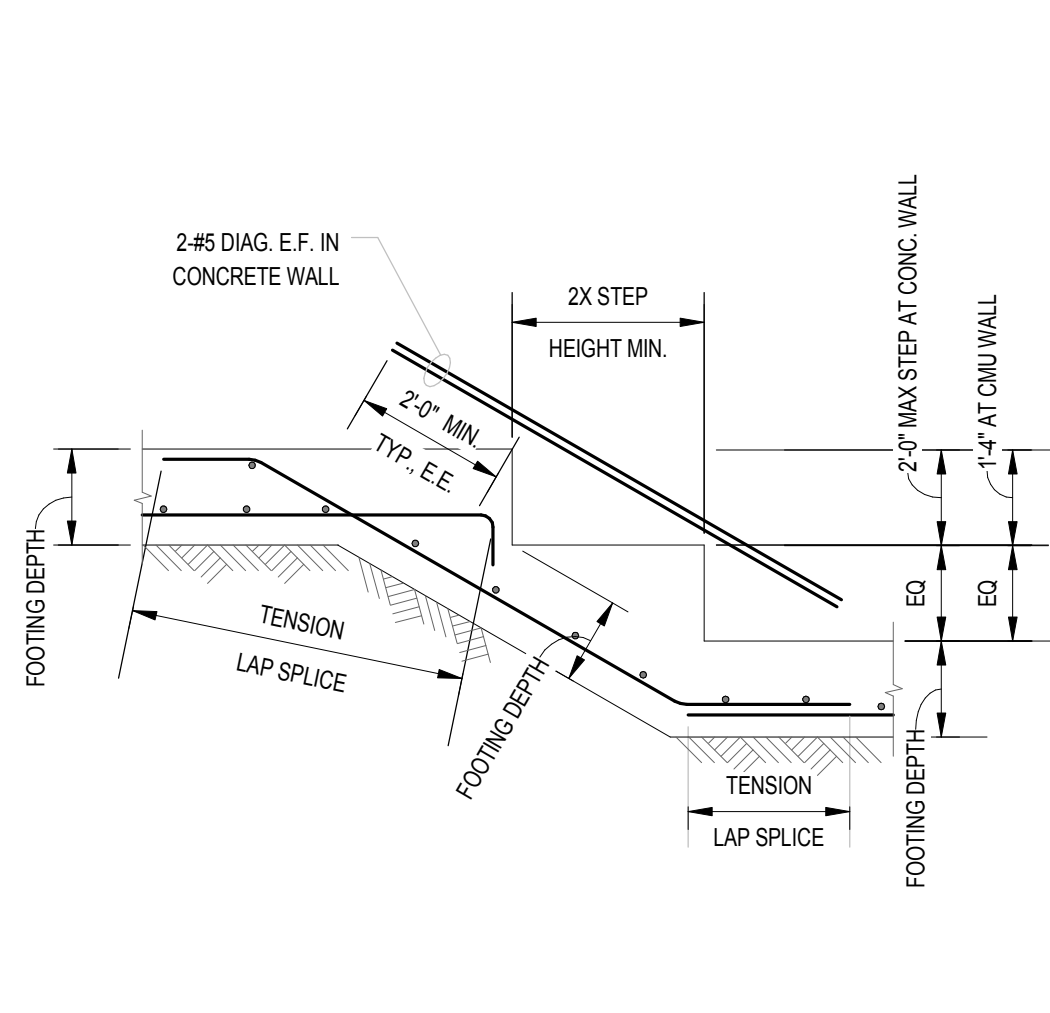
A. STRUCTURAL STEEL

1. STRUCTURAL STEEL CONSTRUCTION HAS BEEN DESIGNED IN ACCORDANCE WITH A.I.S.C. "LOAD AND RESISTANCE FACTOR DESIGN SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS", 2005, U.N.O.
2. STRUCTURAL STEEL SHAPES, PLATES, ETC., SHALL CONFORM TO THE FOLLOWING ASTM DESIGNATIONS, U.N.O.
- |   |                 |
|---|-----------------|
| FLOOR/ROOF BEAMS AND GIRDERS EXCLUDING W8X10 AND SMALLER      | ASTM A992-50    |
| CHANNELS, TEES, ANGLES, BARS, PLATES, W8X10 AND SMALLER BEAMS | ASTM A36        |
| STEEL TUBING (T/S SECTIONS) (Fy = 46 KSI)                     | ASTM A500-GR. B |
| ANCHOR BOLTS  | ASTM A449       |
3. CONNECTION BOLTS SHALL CONFORM TO ASTM A325. USE BEARING TYPE BOLTS WITH THREAD ALLOWED ACROSS THE SHEAR PLANE (TYPE N) AT TYPICAL BEAM SHEAR CONNECTIONS, U.N.O. USE TYPE "SC" BOLTS WITH EITHER DIRECT TENSION INDICATOR OR LOAD INDICATOR WASHERS AT ALL BOLTED SLIP CRITICAL CONNECTIONS.
4. A LISTING OF CONNECTIONS CONSIDERED "SLIP CRITICAL" IS AS FOLLOWS:
- BOLTED CONNECTIONS OF TENSION MEMBERS  
BOLTS USED IN MOMENT CONNECTIONS  
BOLTED SPLICES OF TRUSS TOP AND BOTTOM CHORDS
5. STEEL BEAM CONNECTIONS NOT DETAILED ON THE DRAWINGS SHALL BE DESIGNED BY THE STRUCTURAL STEEL FABRICATOR. BEAM CONNECTIONS SHALL DEVELOP THE END REACTIONS GIVEN ON THE DRAWINGS. WHERE END REACTIONS ARE NOT SPECIFIED, THE BEAM CONNECTION SHALL DEVELOP 50% OF THE BEAMS WEB ALLOWABLE SHEAR CAPACITY. A MINIMUM CONNECTION CAPACITY OF 12 KIPS SHALL BE PROVIDED FOR ALL BEAMS, UNLESS NOTED OTHERWISE BY SPECIFIED REACTION.
- THE STRUCTURAL STEEL FABRICATOR SHALL PROVIDE CERTIFICATION BY A PROFESSIONAL ENGINEER, REGISTERED IN THE STATE OF THE PROJECT, THAT THE CONNECTION DESIGN IS IN ACCORDANCE WITH ALL APPLICABLE CODES AND SPECIFICATIONS.
6. FOR ALL HIGH STRENGTH BOLTS, HARDENED WASHERS SHALL BE PROVIDED.
7. GALVANIZING OF STEEL MEMBERS SHALL CONFORM TO ASTM A123.
8. HEADED STUDS AND DEFORMED BAR ANCHORS USED IN FABRICATION OF EMBEDDED ASSEMBLIES SHALL BE WELDED TO THOSE ASSEMBLIES USING A FULL FUSION PROCESS.
9. STEEL BEAMS SHALL BE ERECTED WITH NATURAL CAMBER UP.
10. ANCHOR BOLTS HAVE NOT BEEN DESIGNED FOR ANY SPECIFIC ERECTION FORCES. THE ERECTOR IS RESPONSIBLE FOR ANY AND ALL GUYING AND BRACING REQUIRED TO ERECT THE BUILDING.
11. COMPOSITE BEAMS USING CONCRETE SLAB AS COMPRESSION FLANGE ARE DESIGNED FOR UNSHORED CONSTRUCTION. THE CONTRACTOR SHOULD ANTICIPATE UP TO 3/8" DEFLECTION UNDER WET WEIGHT OF CONCRETE FOR BEAMS WHICH HAVE NO CAMBER SHOWN ON THE STRUCTURAL DRAWINGS.
12. OPEN WEB STEEL JOISTS AND BRIDGING SHALL CONFORM TO THE STANDARDS OF THE STEEL JOIST INSTITUTE. BRIDGING SHALL BE WELDED TO STEEL BEAMS AND ANCHORED TO MASONRY OR CONCRETE WALLS AT THE ENDS, U.N.O.
13. THE RESPONSIBILITY FOR ANY TEMPORARY SHORING OR BRACING DURING THE CONSTRUCTION PHASE BEFORE COMPLETION OF CONNECTION AND POURING OF FLOOR SLAB IS ADDRESSED IN THE SPECIFICATIONS AND IS THE RESPONSIBILITY OF THE CONTRACTOR.
14. IF NOT SHOWN ON DRAWINGS, SUPPORT OF METAL DECK AROUND COLUMN CLOSURE, SCORED PLATES AROUND THE OPENINGS AND EDGE SLAB SHALL BE PROVIDED BY THE CONTRACTOR.
15. DURING CONSTRUCTION, THE ERECTED STRUCTURAL STEEL SHALL NOT PROCEED HIGHER THAN THE CONCRETE CORE CONSTRUCTION. THE CONTRACTOR SHALL MAKE SAFE PROVISIONS FOR STABILIZING THE STEEL STRUCTURE BOTH HORIZONTALLY AND VERTICALLY. THE STABILITY OF THE FRAME DURING ERECTION IS THE CONTRACTOR'S RESPONSIBILITY.

- B. WELDING
1. WELDED CONSTRUCTION SHALL CONFORM TO THE AMERICAN WELDING SOCIETY "STRUCTURAL WELDING CODE" D1.1: AWS D1.3: SHEET STEEL AND AWS D1.4 "REINFORCING STEEL WELDING CODE".
2. ELECTRODES FOR FIELD AND SHOP WELDS OF STRUCTURAL STEEL SHALL BE E70XX, U.N.O.
3. ELECTRODES FOR WELDING OF REINFORCING STEEL SHALL BE E80XX.
4. ELECTRODES FOR WELDING OF SHEET STEEL SHALL CONFORM TO AWS D1.3.
5. WHEN WELDS ARE NOT CALLED-OUT ON DRAWINGS, THEY ARE MINIMUM SIZE CONTINUOUS FILLET WELDS IN ACCORDANCE WITH AWS D1.1. FILLET WELDS NOT SPECIFIED AS TO LENGTH SHALL BE CONTINUOUS.
6. UNLESS NOTED OTHERWISE ON THE DRAWINGS, ALL GROOVE WELDS SHALL BE FULL PENETRATION.
7. ONLY LOW HYDROGEN ELECTRODES SHALL BE USED ON REINFORCING STEEL AND ASTM A992 STEEL.
8. PROVIDE FILLET WELDS AT ALL CONTACT JOINTS BETWEEN STEEL MEMBERS SUFFICIENT TO DEVELOP THE ALLOWABLE TENSILE STRENGTH OF THE SMALLER MEMBER AT THE JOINT UNLESS DETAILED OTHERWISE ON THE DRAWINGS.

METAL DECK NOTES:

1. METAL DECK SHALL BE GALVANIZED AND SHALL BE PLACED WITH CONTINUOUS SPANS OF THREE OR MORE WHERE POSSIBLE. IN NO CASE SHALL UNSHORED METAL DECK SPANS EXCEED THE MANUFACTURER'S PUBLISHED RECOMMENDATIONS OR DEFLECTION CRITERIA OF SPAN DIVIDED BY 240.
2. ROOF DECK SHALL BE WIDE RIBBED WITH THE FOLLOWING MINIMUM PROPERTIES:
- |                               |
|-------------------------------|
| 1.59-20 GA.                   |
| $f = 150$ IN/IN <sup>2</sup>  |
| $SP = 135$ IN/IN <sup>2</sup> |
| $SN = 47$ IN/IN <sup>2</sup>  |
- WELD DECK TO SUPPORTING MEMBERS ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. DECK AND WELDS SHALL HAVE A MINIMUM DIAPHRAGM SHEAR CAPACITY OF 200 PLF.
3. DECK UNITS SHALL BE LAPPED ONLY OVER SUPPORTS.

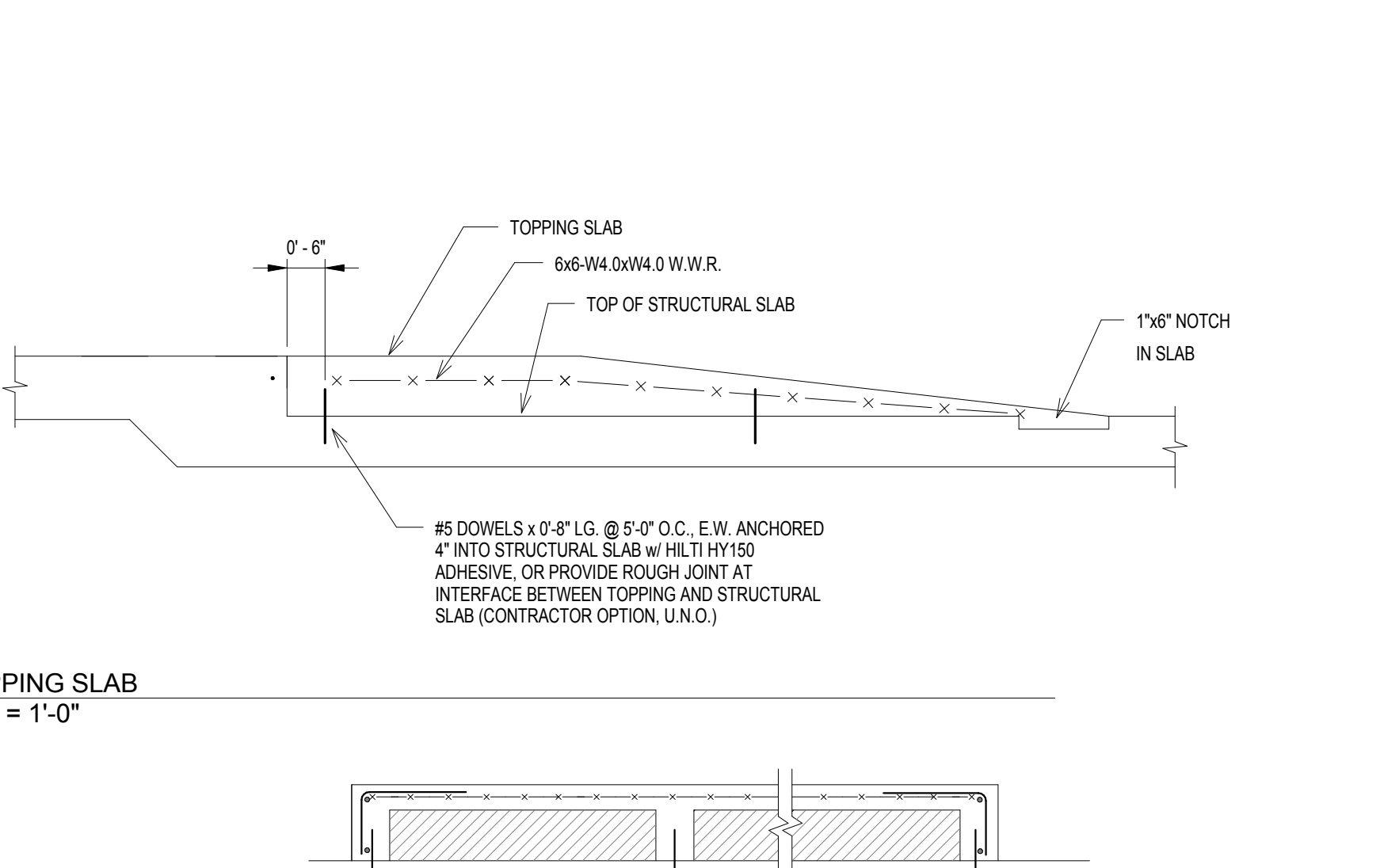


1 STEP IN WALL FOOTING  
1/2" = 1'-0"

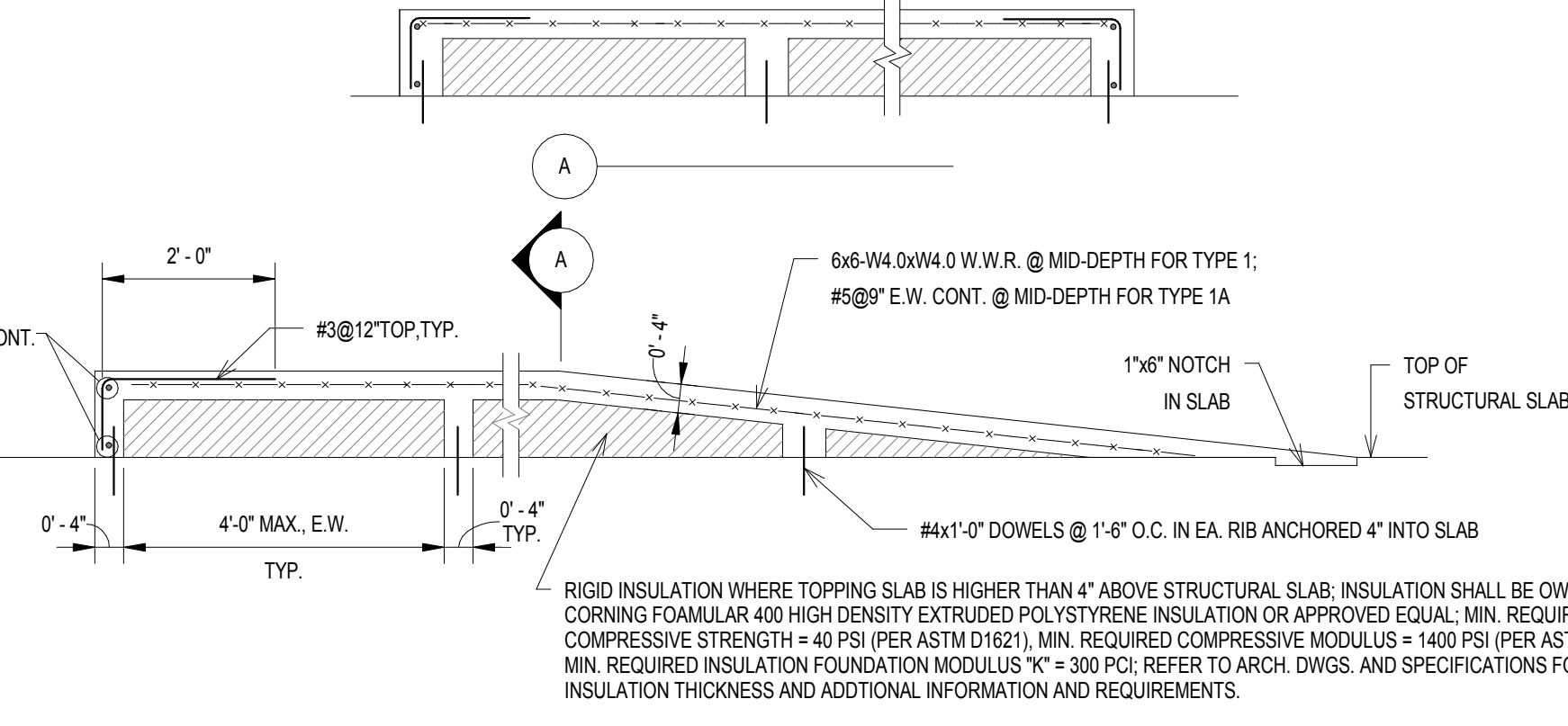
$f_c$	SPLICE CLASS	BAR SIZE					
		#3	#4	#5	#6	#7	#8
3000	CLASS A 1.0 $L_d$	13	17	21	27	37	49
	CLASS B 1.3 $L_d$	17	22	27	35	48	64
4000	CLASS A 1.0 $L_d$	12	15	18	24	32	42
	CLASS B 1.3 $L_d$	16	20	23	31	42	55
5000	CLASS A 1.0 $L_d$	12	13	16	21	29	38
	CLASS B 1.3 $L_d$	16	17	21	27	38	49
6000	CLASS A 1.0 $L_d$	12	12	15	19	26	35
	CLASS B 1.3 $L_d$	16	16	20	25	34	46

- NOTES:
1. USE THE ABOVE DEVELOPMENT LENGTH AND LAP SPICE TABLE FOR BEAMS, JOISTS, COLUMNS, WALLS, SLABS, ETC. WHEN THE CLEAR SPACE BETWEEN BARS IS GREATER THAN 2 BAR DIAMETERS.
2. WHEN THE CLEAR SPACE BETWEEN BARS IS LESS THAN OR EQUAL TO 2 BAR DIAMETERS, MULTIPLY DEVELOPMENT AND SPLICE LENGTHS LISTED IN TABLE BY 1.43.
3. TENSION DEVELOPMENT LENGTH =  $L_d$ . LENGTHS LISTED IN TABLE ARE IN INCHES.
4. PROVIDE LAP SPICE LENGTH BASED ON THE LARGER BAR BEING LAPPED WHEN BARS OF DIFFERENT SIZES ARE LAP SPLICED.
5. FOR TOP BARS, MULTIPLY THE DEVELOPMENT AND SPLICE LENGTHS BY 1.3. TOP BARS ARE DEFINED AS HORIZONTAL REINFORCEMENT SO PLACED THAT MORE THAN 12 INCHES OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE BAR.

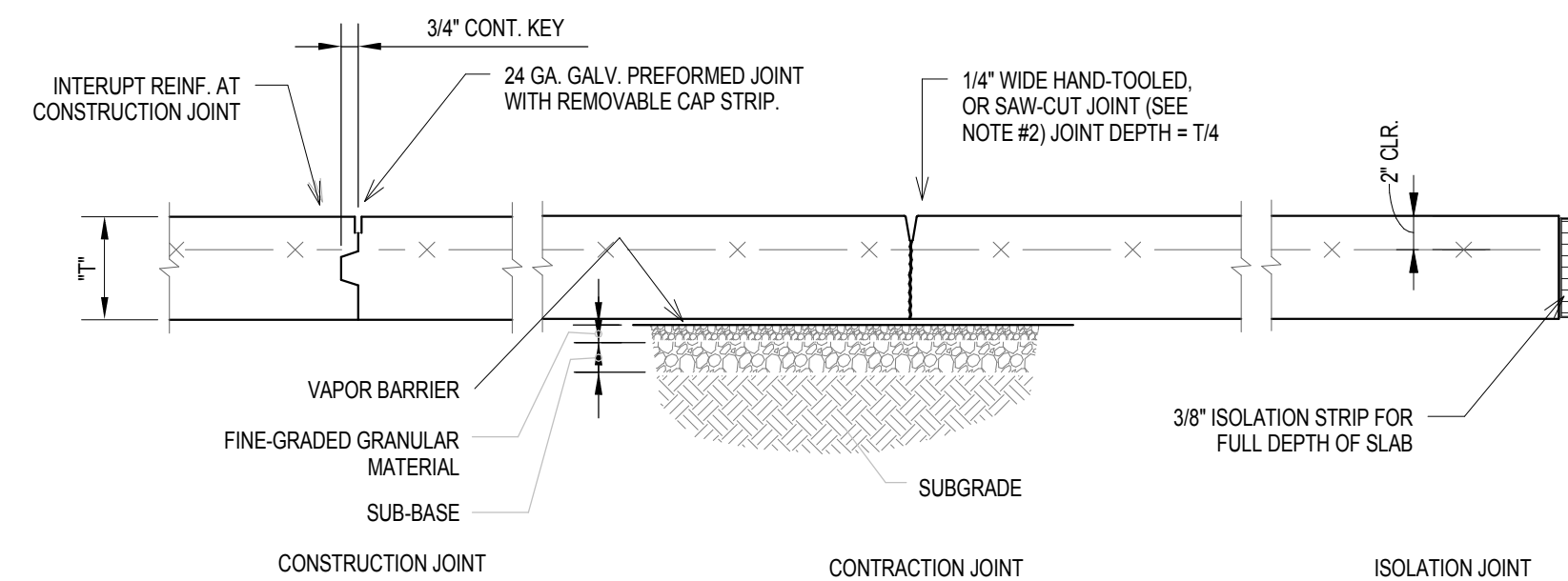
TENSION DEVELOPMENT AND LAP  
SPICE LENGTH FOR N.W.C. (INCHES)  
1/2" = 1'-0"



6 TOPPING SLAB  
1/2" = 1'-0"

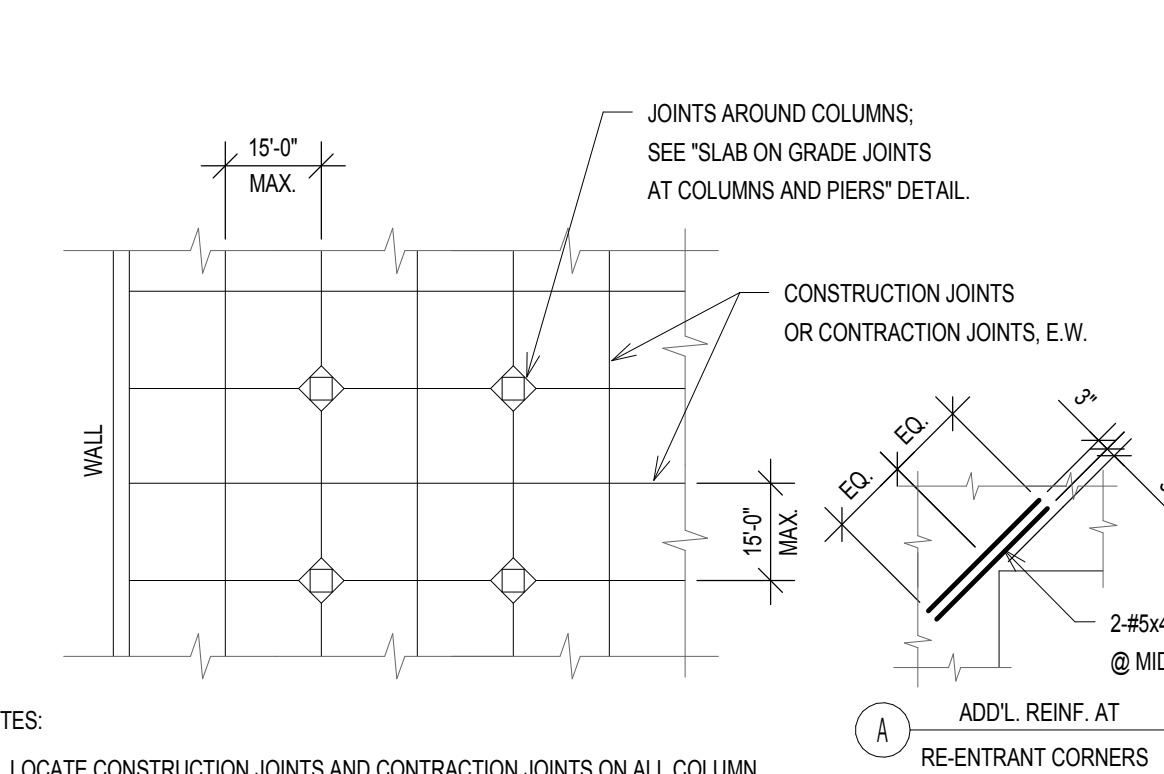


7 TOPPING SLAB  
1/2" = 1'-0"



- NOTES:
1. CONTRACTION JOINTS SHALL BE INSTALLED EITHER BY HAND TOOLING, OR BY SAW-CUTTING USING A "SOFF-CUT" ULTRA EARLY ENTRY DRY-CUT SAW OR AN APPROVED EQUAL. JOINTS SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF FINISHING OPERATIONS.
2. REFER TO SPECIFICATIONS AND ARCHITECTURAL DRAWINGS FOR JOINT SEALANT REQUIREMENTS (IF ANY).
3. REFER TO SPECIFICATIONS AND TO GEOTECHNICAL REPORT FOR REQUIREMENTS FOR FINE-GRADED GRANULAR MATERIAL, SUB-BASE MATERIAL, AND VAPOR BARRIER (WHERE OCCURRING). REFER TO SPECIFICATIONS FOR SEQUENCE OF INSTALLATION OF FINE-GRADED GRANULAR MATERIAL, SUB-BASE MATERIAL, AND VAPOR BARRIER.

2 SLAB ON GRADE CONSTRUCTION  
1/2" = 1'-0"



- NOTES:
1. LOCATE CONSTRUCTION JOINTS AND CONTRACTION JOINTS ON ALL COLUMN GRID LINES AND SUB-DIVIDE AS REQUIRED TO LIMIT MAXIMUM SPACING BETWEEN JOINTS TO MAXIMUM DIMENSIONS INDICATED ABOVE.
2. LOCATE JOINTS IN A PATTERN THAT SUB-DIVIDES SLAB INTO PANELS THAT ARE SQUARE OR RECTANGULAR AND THAT HAVE AN ASPECT RATIO BETWEEN 1.0 (PREFERRED) TO 1.5.
3. PROVIDE JOINTS AT ALL RE-ENTRANT CORNERS OR PROVIDE REINFORCING PER DETAIL "A" AT RE-ENTRANT CORNERS WHERE JOINTS CAN NOT OCCUR.

4 SLAB ON GRADE JOINT ARRANGEMENT  
1/2" = 1'-0"

ADD ALTERNATES

- ALT #1 ALTERNATE NO. 1. WEST ENTRANCE CANOPY PROJECT TO INCLUDE ALL WORK EXCEPT:  
EPDM roof on tapered insulation on ribbed metal deck (exposed below-paint) on steel frame (exposed and painted) on 3/8" deep reinforced concrete footings. Provide metal fascia (similar to new East side, ALT. No. 6). Radiant heat topping slab under canopy to include entrance slab, stairs and ramp.
- ALT #3 ALTERNATE NO. 3. BRICK WEARING FACE ON NEW RETAINING WALL PROJECT TO INCLUDE ALL WORK EXCEPT:  
Add one (1) wythe brick and precast concrete cap to proposed concrete retaining wall at North wall of Pool Equipment Room and West and North walls of Pool Enclosure Base.
- ALT #4 ALTERNATE NO. 4. BRICK GABLE END WALL PROJECT TO INCLUDE ALL WORK EXCEPT:  
Replace proposed polycarbonate envelope at West end with one (1) wythe brick exterior and one (1) wythe brick gable interior on each side of reinforced 8" CMU wall with vent. Bond beams at 12' AFF. Provide 2" rigid insulation at exterior side of CMU.
- ALT #5 ALTERNATE NO. 5. WEIGHT CONDITIONING FIT OUT PROJECT TO INCLUDE ALL WORK EXCEPT:  
Provide all interior walls, flooring, and finishes for W.T. Suite. Area to include electrical and plumbing fixtures and connections.
- ALT #6 ALTERNATE NO. 6. STAFF BREAK ROOM & EAST ENTRY VESTIBULE PROJECT TO INCLUDE ALL WORK EXCEPT:  
EPDM roof on tapered insulation on ribbed metal deck on existing steel channel frame. Provide aluminum storefront window system enclosure. Provide metal panel fascia and soffit. Provide second set of storefront entrance doors. See document set for plans, section, exterior elevations, and interior finishes.
- ALT #7 ALTERNATE NO. 7. EAST ENTRANCE RAMP AND WALL PROJECT TO INCLUDE ALL WORK EXCEPT:  
Provide 10' reinforced concrete wall at North and Northeast sides of new entrance ramp. Provide 5' deep by 6' wide sidewalk on compacted fill with turned down edge at South and Southwest sides. Provide 2' 00" painted steel pipe rail with stainless steel mesh infill on top of new concrete wall (rail and mesh one side only). See document set for plan, section, and exterior elevations.
- ALT #8 ALTERNATE NO. 8. AUDIOLOGY FITOUT PROJECT TO INCLUDE ALL WORK EXCEPT:  
Provide interior walls, flooring, and finishes for Audiology Suite. Area to include electrical and plumbing fixtures and connections.
- ALT #9 ALTERNATE NO. 9. VENTILATION DUCTWORK PROJECT TO INCLUDE ALL WORK EXCEPT:  
Provide ventilation supply and exhaust ductwork demolition and installation.

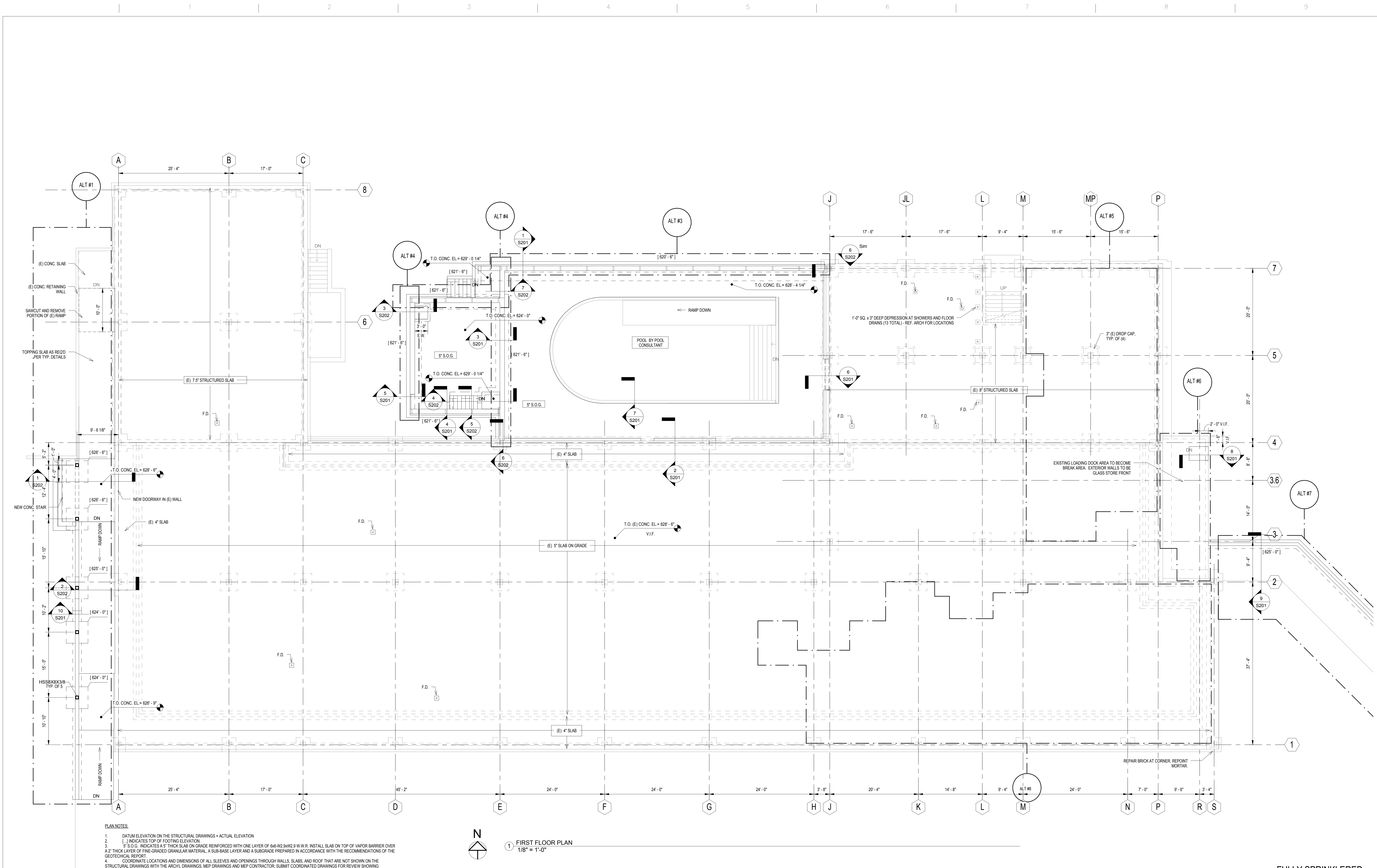
ABBREVIATIONS USED ON STRUCTURAL DRAWINGS			
A.F.F. ADDL. A.R. L	ABOVE FINISHED FLOOR ADDITIONAL ANCHOR ROD ANGLE	LWC L.F. L.G. LLH LLV L.P.	LIGHT WEIGHT CONCRETE LINEAR FOOT LONG LONG LEG HORIZONTAL LONG LEG VERTICAL LOW POINT
BET. BENT. BM BRG. B.S. B or BOT. B.O.D. BLDG.	BETWEEN BASEMENT BEAM BEARING BOTH SIDES BOTTOM OF DECK BUILDING	MECH. M.E.P. MIN.	MECHANICAL MECHANICAL, ELECTRICAL, PLUMBING MINIMUM
CANT. C.I.P. CL. CLR. COL. CMU CONN. CONT. C.J.	CANTILEVER CAST-IN-PLACE CENTER LINE CLEAR COLUMN CONCRETE MASONRY UNIT CONNECTION CONTINUOUS CONTROL JOINT	N.S. N.T.S.	NOT TO SCALE
DET. DIA. DIM. DIR. DRL. DRWG.	DETAIL DIAMETER DIMENSION DIRECTION DOUBLE DRAWINGS or DRAWINGS	O.C. OPENING O.D. O.F.	ON CENTER OPENING OUTSIDE DIAMETER OUTSIDE FACE
EA. E.E. E.F. E.W. E.O.D. E.O.S. EQ. EMBED. EQ. EQ. E.J.	EACH EACH END EACH FACE EACH WAY EDGE OF DECK EDGE OF SLAB ELEVATION ELEVATION EXPANSION JOINT	PEN. PERP. PC. PL. P.T. P.L.F. PSI PSF	PENETRATION PERPENDICULAR PRECAST PLATE POST-TENSIONED POUNDS PER LINEAR FOOT POUNDS PER SQUARE INCH POUNDS PER SQUARE FOOT
F.S. FIN. FL. FTG.	FAR SIDE FINISH or FINISHED FLOOR FOOTING	REINF. REM. RECD	REINFORCING or REINFORCE REMAINDER REQUIRED
GALV. GA. HGR. HT. H.P. HK. HOR.	GALVANIZED GAUGE or GAGE HANGER HEIGHT HIGH POINT HOOK HORIZONTAL	SCHED. SECT. S.W. SIM. S.O.G. SLOPED SP. SQ. SF	SCHEDULE SECTION SHORT WAY SIMILAR SLAB ON GRADE SLOPED SPACES SQUARE SQUARE FOOT STANDARD
IN. INT. INV.	INCHES INTERIOR INVERT	STL. STIFF. STRUCT. SYMM.	STEEL STIFFENER STRUCTURAL SYMMETRICAL
JT. K	JOINT 1000 POUNDS	TEMP. TAB TOP OF BEAM T.O.B. T.O.C. T.O.S. T.O.W. TYP.	TEMPORARY TOP TOP OF BEAM TOP OF CONCRETE TOP OF STEEL TOP OF WALL TYPICAL
		U.N.O.	UNLESS NOTED OTHERWISE
		V.I.F. VERT.	VERIFY IN FIELD VERTICAL
		W.W.F. W.W.R. REINFORCEMENT W.P.	WELDED WIRE FABRIC WELDED WIRE WITH WORK POINT

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ISSUED FOR BID

CONSULTANTS:										PROJECT MANAGER:		Project Number 3619		Scale As indicated		Drawing Title GENERAL NOTES AND TYPICAL DETAILS		Project Title BUILDING 69 PM & R RENOVATION		VA Project Number 542-CSI-203		Office of Facilities Management	
Project Manager BRAY MOONEY CONSULTING		Architect ARRAY HEALTHCARE FACILITIES SOLUTIONS		Structural Engineer WZG STRUCTURAL CONSULTING ENGINEERS		MEP/FP Engineer APOGEE CONSULTING GROUP		Civil Engineer GUIDON DESIGN		Fire Protection Consultant HARRINGTON GROUP		Cost Estimator BRAY MOONEY CONSULTING		Aquatic Consultant ATLANTIC AQUATIC ENGINEERING		Location 1400 Black Horse Hill, Coatesville, PA		Building Number 69					
410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716		2530 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA 19406 Tel: (610) 270-0599		P.O. BOX 24 40 LITTLE ROAD ZIEGLERVILLE, PA 19422 Tel: (610) 287-3194		7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC 27606 Tel: (919) 856-7420		2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 800-6386		7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC 28277 Tel: (704) 531-9577		410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716		1823 DEEP RUN ROAD PIPERSVILLE, PA 18947 Tel: (215) 766-0409		Date 3/29/2013		Checked RAZ		Drawing Number S001			
Revisions		Date																Dwg. 7 of 86		 Department of Veterans Affairs			




three inches = one foot  
one and one half inches = one foot  
one inch = one foot  
three quarters inch = one foot  
one half inch = one foot  
three eighths inch = one foot  
one quarter inch = one foot  
one eighth inch = one foot



PLAN NOTES:  
1. DATUM ELEVATION ON THE STRUCTURAL DRAWINGS = ACTUAL ELEVATION  
2. (L) INDICATES TOP OF FOOTING ELEVATION  
3. 5" S.O.G. INDICATES A 5" THICK SLAB ON GRADE REINFORCED WITH ONE LAYER OF 6#X2' W/W.R. INSTALL SLAB ON TOP OF VAPOR BARRIER OVER A 2" THICK LAYER OF FINE-GRADED GRANULAR MATERIAL, A SUB-BASE LAYER AND A SUBGRADE PREPARED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT.  
4. COORDINATE LOCATIONS AND DIMENSIONS OF ALL SLEEVES AND OPENINGS THROUGH WALLS, SLABS, AND ROOF THAT ARE NOT SHOWN ON THE STRUCTURAL DRAWINGS WITH THE ARCHT. DRAWINGS, MEP DRAWINGS AND MEP CONTRACTOR, SUBMIT COORDINATED DRAWINGS FOR REVIEW SHOWING DIMENSIONS AND LOCATIONS OF ALL SLEEVES AND OPENINGS.

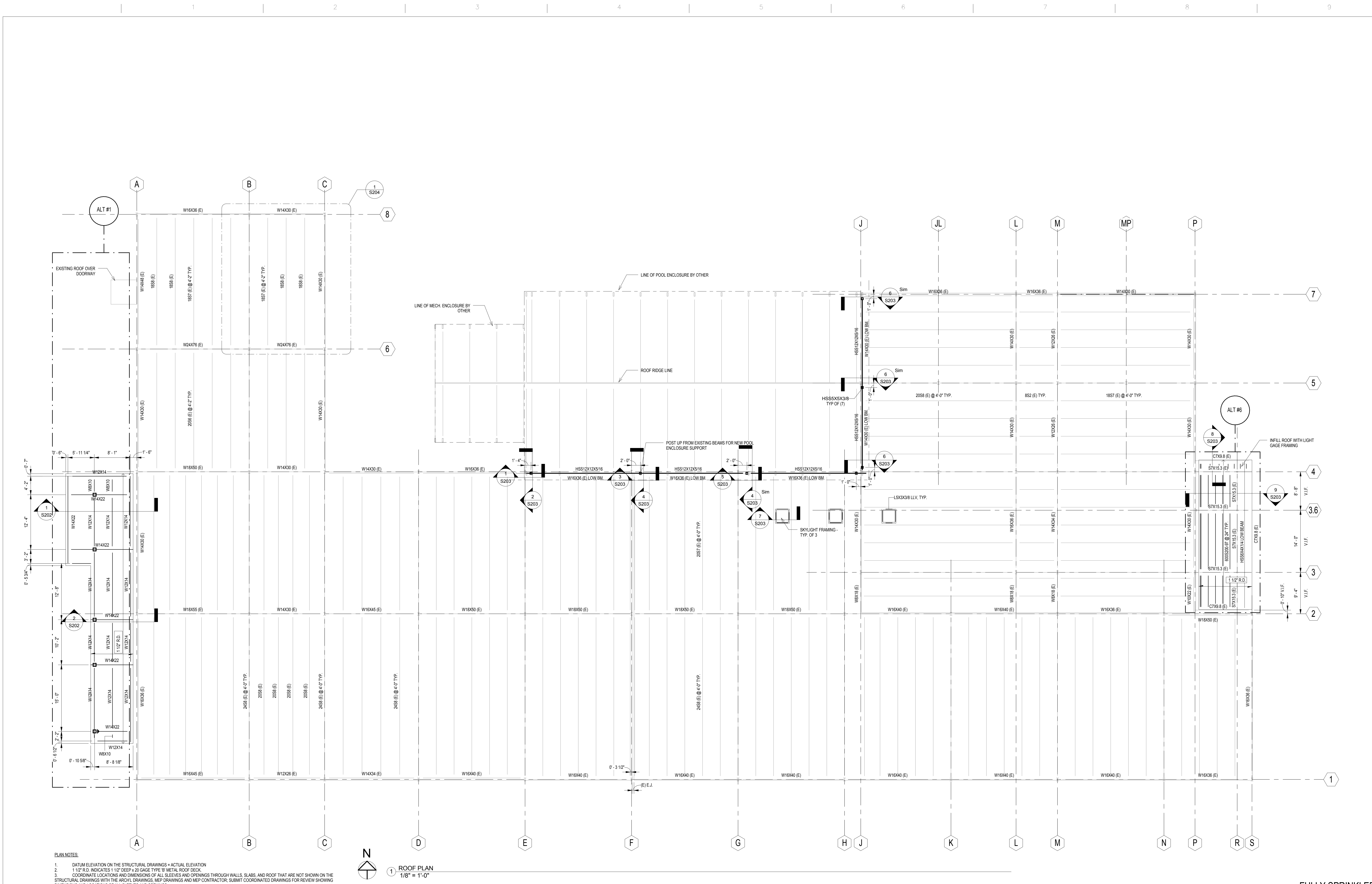
N  
1 FIRST FLOOR PLAN  
1/8" = 1'-0"

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ISSUED FOR BID

		CONSULTANTS:								PROJECT MANAGER:		Project Number 3619	Scale As indicated	Drawing Title  FIRST FLOOR PLAN		Project Title  BUILDING 69 PM & R RENOVATION		VA Project Number 542-CSI-203		Office of Facilities Management			
		Project Manager BRAY MOONEY CONSULTING		Architect ARRAY HEALTHCARE FACILITIES SOLUTIONS		Structural Engineer WZG STRUCTURAL CONSULTING ENGINEERS		MEP/FP Engineer APOGEE CONSULTING GROUP		Civil Engineer GUIDON DESIGN		Fire Protection Consultant HARRINGTON GROUP		Cost Estimator BRAY MOONEY CONSULTING		Aquatic Consultant ATLANTIC AQUATIC ENGINEERING		Building Number 69					
		410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716		2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA 19406 Tel: (610) 270-0599		P.O. BOX 24 40 LITTLE ROAD ZIEGLERVILLE, PA 19422 Tel: (610) 287-3194		7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC 27606 Tel: (919) 858-7420		2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 800-6386		7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC 28277 Tel: (704) 531-9077		410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716		1823 DEEP RUN ROAD PIPERSVILLE, PA 18947 Tel: (215) 766-0409		Drawing Number  S111					
Revisions		Date														Date 3/29/2013		Checked RAZ			Drawn NEW		Dwg. 8 of 86
																				Dwg. 8 of 86		 Department of Veterans Affairs	

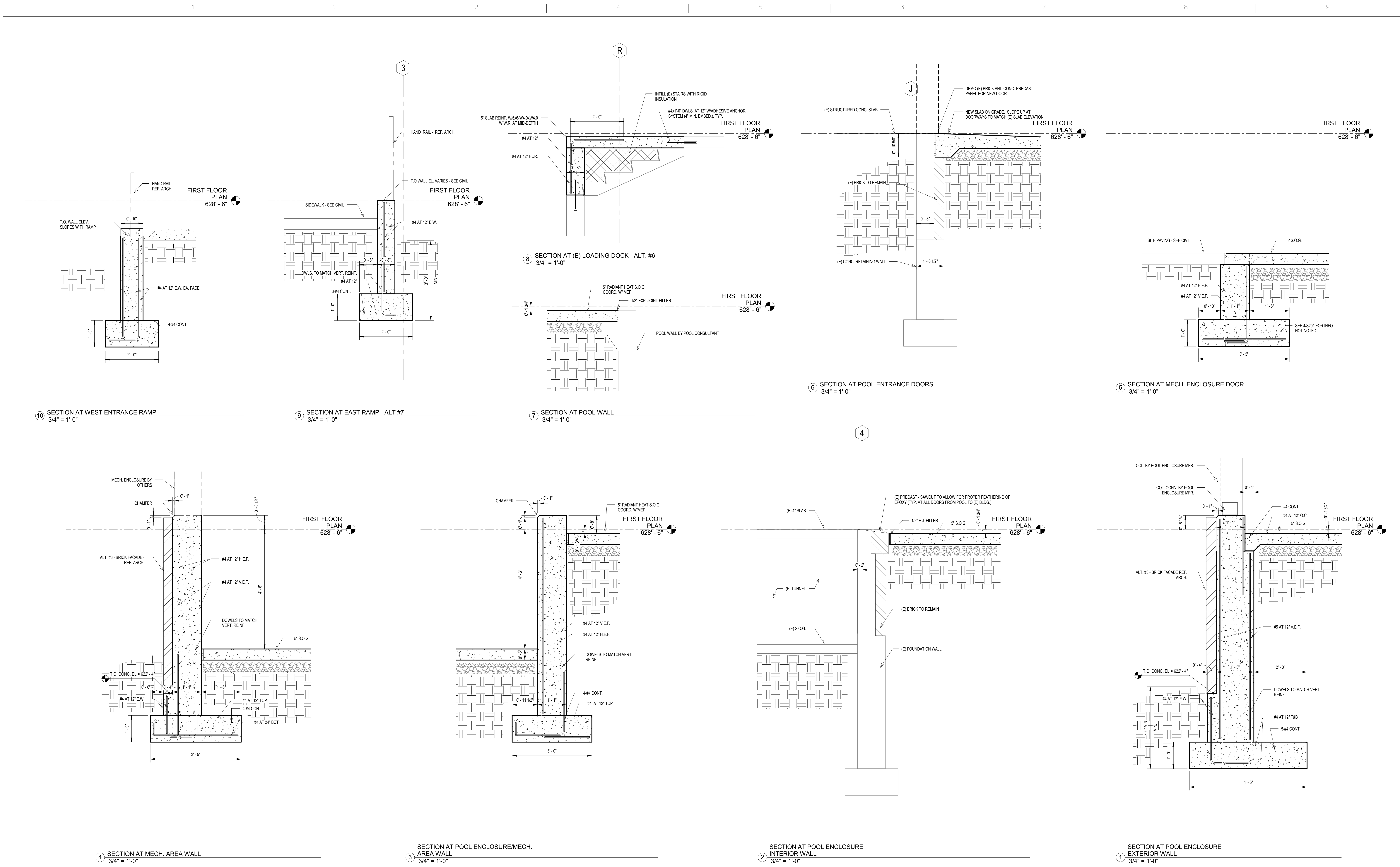


one eighth inch = one foot  
one quarter inch = one foot  
three eighths inch = one foot  
one half inch = one foot  
three quarters inch = one foot  
one inch = one foot  
one and one half inches = one foot  
two inches = one foot  
three inches = one foot  
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seven inches = one foot  
eight inches = one foot  
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ten inches = one foot  
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ninety inches = one foot  
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ninety two inches = one foot  
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ninety four inches = one foot  
ninety five inches = one foot  
ninety six inches = one foot  
ninety seven inches = one foot  
ninety eight inches = one foot  
ninety nine inches = one foot  
one hundred inches = one foot





three inches = one foot  
one and one half inches = one foot  
one inch = one foot  
three quarters inch = one foot  
one half inch = one foot  
three eighths inch = one foot  
one quarter inch = one foot  
one eighth inch = one foot



Revisions

Date

CONSULTANTS:

<b>Project Manager</b> BRAY MOONEY CONSULTING 410 E. 21 STREET CHESTER, PA. 19013 Tel (610) 872-3716	<b>Architect</b> ARRAY HEALTHCARE FACILITIES SOLUTIONS 2530 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA. 19406 Tel (610) 270-0599	<b>Structural Engineer</b> WZG STRUCTURAL CONSULTING ENGINEERS P.O. BOX 24 40 LITTLE ROAD ZIEGLERVILLE, PA. 19482 Tel (610) 287-3194	<b>MEP/FP Engineer</b> APOGEE CONSULTING GROUP 7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC. 27606 Tel (919) 858-7420	<b>Civil Engineer</b> GUIDON DESIGN 2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel (317) 800-6386	<b>Fire Protection Consultant</b> HARRINGTON GROUP 7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC. 28277 Tel (704) 531-9277	<b>Cost Estimator</b> BRAY MOONEY CONSULTING 410 E. 21 STREET CHESTER, PA. 19013 Tel (610) 872-3716	<b>Aquatic Consultant</b> ATLANTIC AQUATIC ENGINEERING 1823 DEEP RUN ROAD PIPERSVILLE, PA. 18947 Tel (215) 766-0409
--	--	---	---	--	--	---	---

PROJECT MANAGER:

Bray Mooney Consulting

Project Number

3619

Scale

3/4" = 1'-0"

Drawing Title

DETAILS

Approved: Project Director

Project Title

BUILDING 69 PM & R RENOVATION

Location

1400 Black Horse Hill, Coatesville, PA

Date

3/29/2013

Checked

RAZ

Drawn

NEW

VA Project Number

542-CSI-203

Building Number

69

Drawing Number

S201

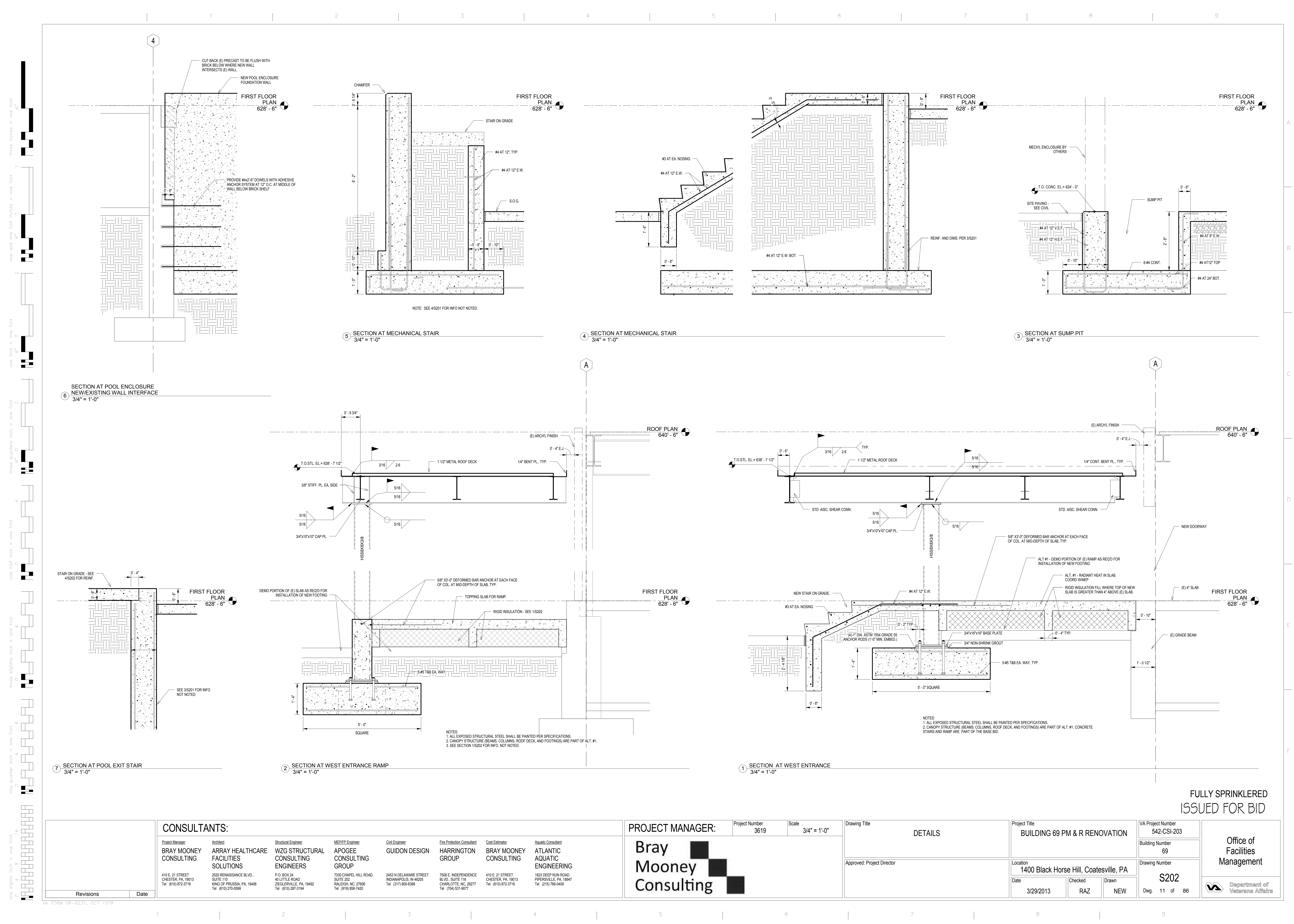
Dwg. 10 of 86

Office of Facilities Management

Department of Veterans Affairs

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CONSULTANTS:

Project Manager  
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**HARRINGTON GROUP**

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CHARLOTTE, NC 28277  
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**ATLANTIC AQUATIC ENGINEERING**

1823 DEEP RUN ROAD  
PIPERSVILLE, PA 18947  
Tel: (215) 766-0409

PROJECT MANAGER:

**Bray Mooney Consulting**

Project Number  
3619

Scale  
3/4" = 1'-0"

Drawing Title

DETAILS

Approved: Project Director

Project Title

BUILDING 69 PM & R RENOVATION

Location

1400 Black Horse Hill, Coatesville, PA

Date

3/29/2013

Checked

RAZ

Drawn

NEW

VA Project Number

542-CSI-203

Building Number

69

Drawing Number

S202

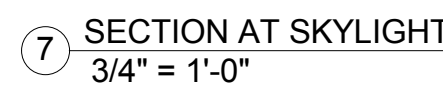
Dwg. 11 of 86

Office of  
Facilities  
Management

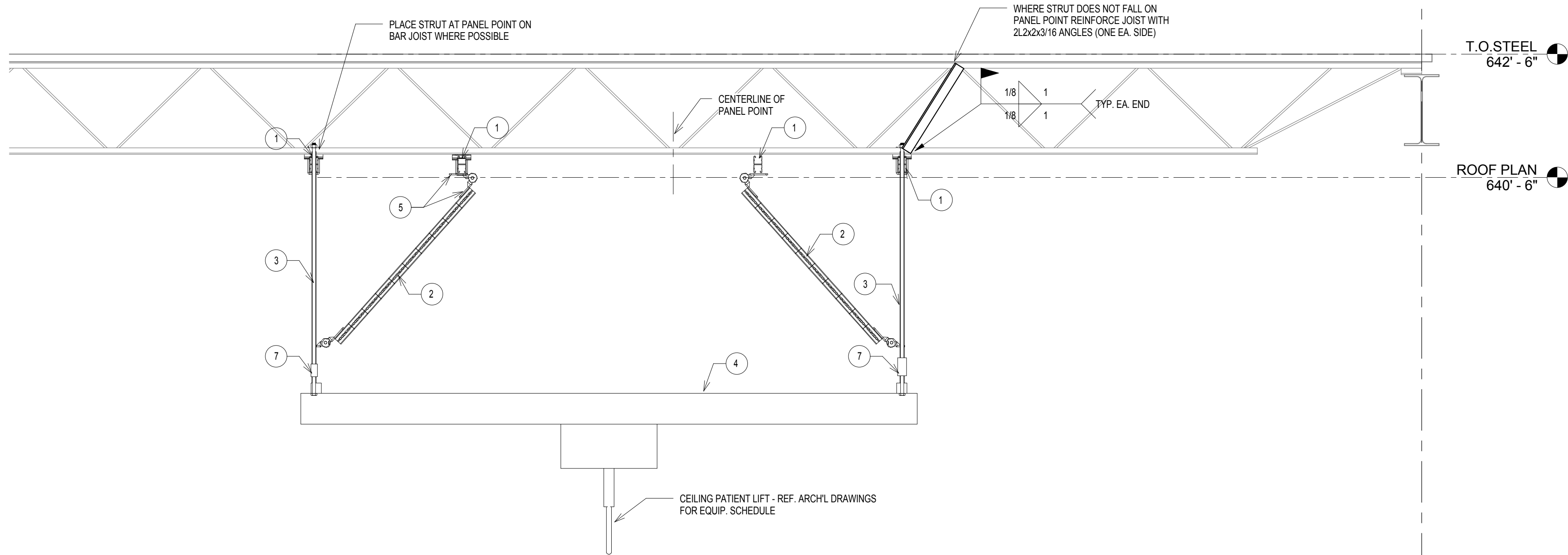
Department of  
Veterans Affairs

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ISSUED FOR BID

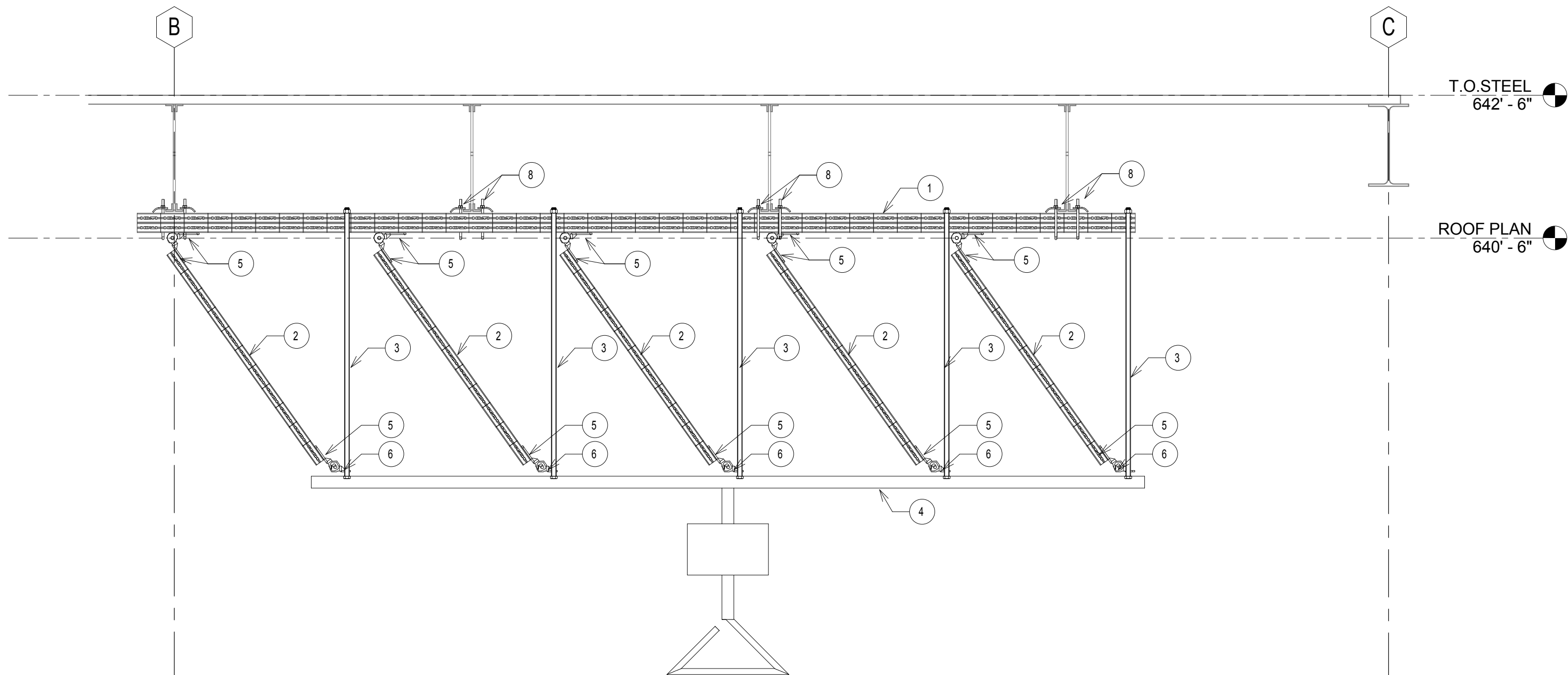


 Department of  
Mathematics 028-2Page 10 of 10

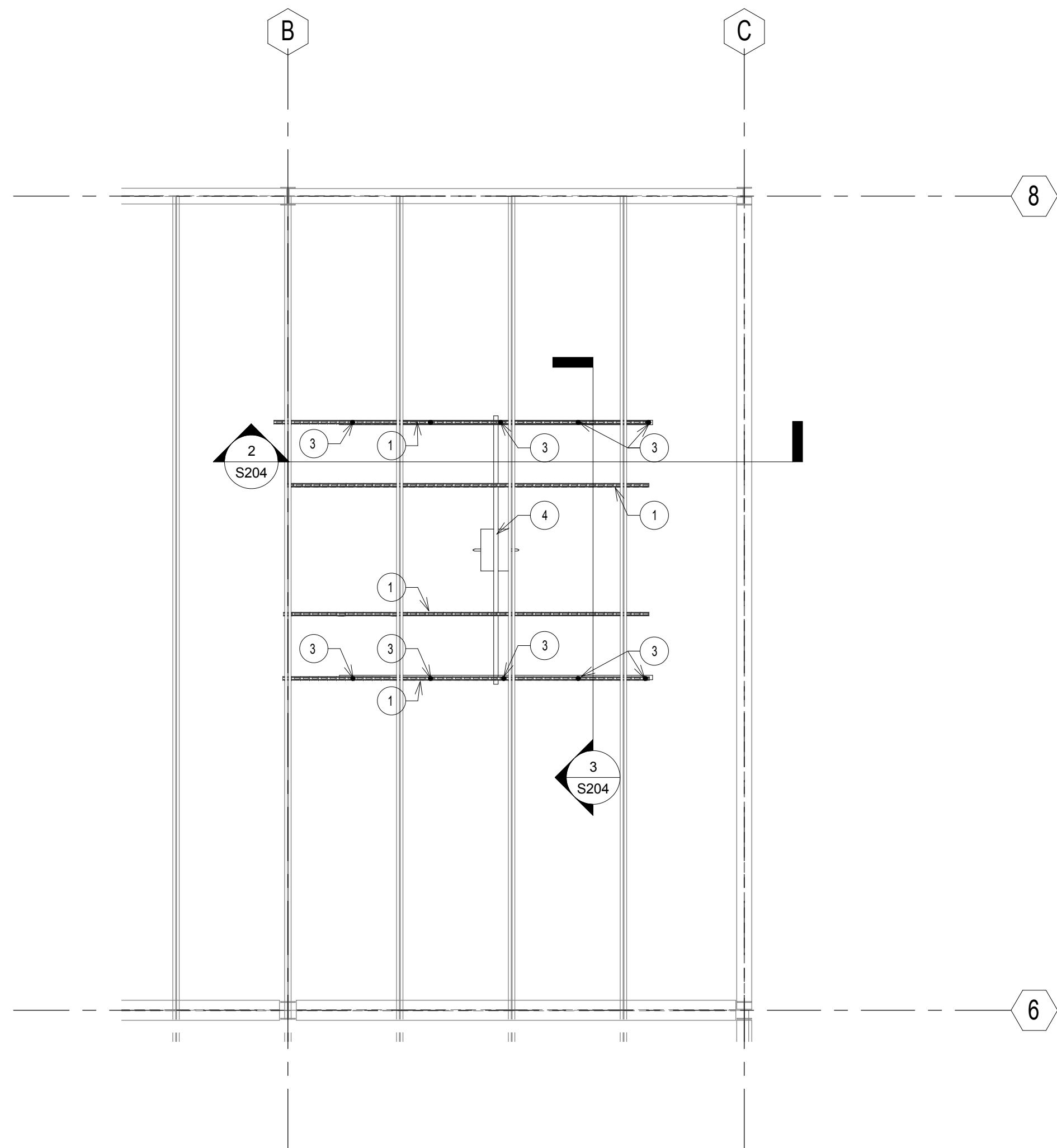




3 SECTION AT PATIENT LIFT  
3/4" = 1'-0"



2 SECTION AT PATIENT LIFT  
3/4" = 1'-0"



1 CEILING PATIENT LIFT  
1/4" = 1'-0"

PARTS LIST	
1	1 5/8" 12 GAGE STRUT 828 (3 1/4" TOTAL HEIGHT)
2	1 5/8" STRUT (12 GAGE) LATERAL BRACE - 2 PER THREADED ROD (1 EA. DIRECTION)
3	1/2" DIA. THREADED ROD, 3'-0" MAX. SPA. PER PATIENT LIFT MANUF. REQUIREMENTS.
4	PATIENT LIFT RAIL PROVIDED BY PATIENT LIFT VENDOR.
5	SEISMIC HINGE, STRUT HALF W/BOLT AND NUT (ITEM NO. 00333309) ATTACHED WITH TWO 1/2" DIA. BOLTS, LOCKWASHERS, AND 1/2" STRUT NUTS.
6	SEISMIC HINGE, BASE HANGER HALF, 1/2" (ITEM NO. 00333309).
7	1/2" DIA. ROD COUPLER W/1/2" LOCK WASHER AND NUT.
8	BEAM CLAMP

PATIENT LIFT NOTES:  
1. ALL BARIATRIC PATIENT CEILING LIFTS ARE TO BE ARJO HUNBLEIGH MAXI SKY 600.  
2. HLTI STRUT IS THE BASIS OF DESIGN FOR STRUT DESIGN.

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ISSUED FOR BID

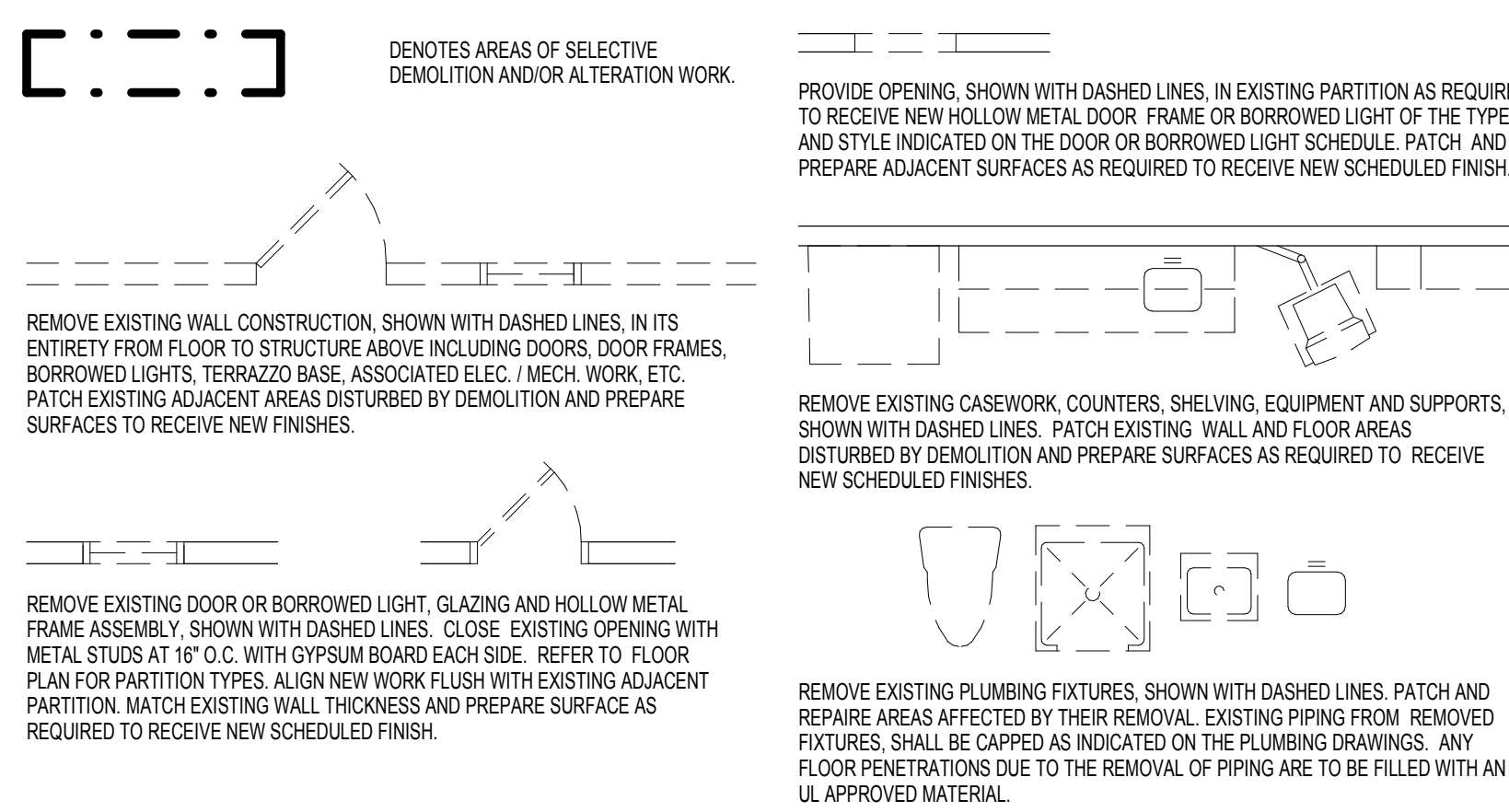
CONSULTANTS:										PROJECT MANAGER:		Project Number 3619	Scale As indicated	Drawing Title  PATIENT LIFT DETAILS		Project Title BUILDING 69 PM & R RENOVATION		VA Project Number 542-CSI-203		Office of Facilities Management	
Project Manager BRAY MOONEY CONSULTING		Architect ARRAY HEALTHCARE FACILITIES SOLUTIONS	Structural Engineer WZG STRUCTURAL CONSULTING ENGINEERS	MEP/FP Engineer APOGEE CONSULTING GROUP	Civil Engineer GUIDON DESIGN	Fire Protection Consultant HARRINGTON GROUP	Cost Estimator BRAY MOONEY CONSULTING	Aquatic Consultant ATLANTIC AQUATIC ENGINEERING		<div>Bray Mooney Consulting</div>		Approved: Project Director		Location 1400 Black Horse Hill, Coatesville, PA		Drawing Number  S204					
410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716		2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA 19406 Tel: (610) 270-0599	P.O. BOX 24 40 LITTLE ROAD ZIEGLERVILLE, PA 19402 Tel: (610) 287-3194	7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC 27606 Tel: (919) 858-7420	2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 800-6386	7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC 28277 Tel: (704) 531-9277	410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716	1823 DEEP RUN ROAD PIPERSVILLE, PA 18947 Tel: (215) 786-0409				Date 3/29/2013		Checked RAZ	Drawn NEW	Dwg. 13 of 86					
Revisions		Date																			



## DEMOLITION NOTES

1. ENCLOSE WITH A GYPSUM WALL BOARD PARTITION ANY EXISTING DUCTS, PIPES AND ELECTRICAL CONDUITS THAT ARE LEFT EXPOSED FROM DEMOLITION WORK IN FINISHED SPACES.
2. WHERE EXISTING EXTERIOR WALL OR INTERIOR PARTITIONS ARE DAMAGED IN AREAS OF SELECTIVE DEMOLITION BY THE REMOVAL OF EXISTING CONSTRUCTION OR ANY OTHER DEMOLITION ACTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR EXISTING WALL SURFACES TO MATCH EXISTING OR TO PRODUCE A SMOOTH SURFACE TO RECEIVE NEW FINISHES.
3. ALL AREAS IN EXISTING WALL / PARTITION ABOVE CEILING LINE THAT ARE AFFECTED BY INSTALLATION OF NEW WORK SHALL BE REPAIRED COMPLETELY WITH UL-APPROVED MATERIALS AND PRODUCTS TO MATCH EXISTING INSTALLATION AND FIRE RATED ASSEMBLIES.
4. WHERE LEVEL CHANGES, HOLES, DEPRESSIONS, OR FORMED TRENCHES ARE UNCOVERED IN EXISTING CONCRETE SLAB BY THE REMOVAL OF EXISTING WALLS, EXISTING FLOORING OR ANY OTHER DEMOLITION ACTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO PATCH AND REPAIR EXISTING CONCRETE SURFACES WITH A LATEX OR GYPSUM LEVELING COMPOUND UNLESS SPECIFIED OTHERWISE TO PRODUCE A SMOOTH LEVEL SURFACE TO RECEIVE NEW FINISHES.
5. FILL EXISTING PIPE AND CONDUIT HOLES RESULTING FROM DEMOLITION WORK OR ANY OTHER EXISTING FLOORS OR WALL PENETRATIONS WITH AN UL-APPROVED MATERIAL TO MATCH THE EXISTING FIRE RATED ASSEMBLY.
6. WHERE PIPES, CONDUITS, DUCTWORK, ETC. ARE TO BE REMOVED FROM ANY WALL, FLOOR OR ROOF SYSTEM THAT IS TO REMAIN, THE OPENING SHALL BE INFILLED WITH MATERIALS THAT MATCH THE EXISTING CONSTRUCTION AND RESTORED TO MAINTAIN DESIGNATED FIRE OR SMOKE RATING. NEW PENETRATIONS THRU EXISTING WALLS, FLOORS OR ROOFS SHALL BE FIRE RATED TO MATCH EXISTING FIRE RATINGS. WHERE HOLES IN FLOORS OR FLOOR OPENINGS ARE UNCOVERED OR CREATED BY SELECTIVE DEMOLITION WORK, THE CONTRACTOR MUST DO ONE OF THE FOLLOWING:
  - A. WHERE OPENINGS ARE ACCESSIBLE TO FOOT TRAFFIC, EXPOSED TO VIEW, OR ARE GREATER THAN 2" THE OPENING MUST BE FILLED WITH A CONCRETE SYSTEM SIMILAR TO EXISTING.
  - B. AREAS NOT EXPOSED TO VIEW, OR GREATER THAN 6" THE OPENING MUST BE FILLED WITH A CONCRETE SYSTEM SIMILAR TO EXISTING.
  - C. AREAS NOT EXPOSED TO VIEW, CONCEALED BY CONSTRUCTION OR WHERE THE OPENING IS LESS THAN 6" THE OPENING MUST BE FILLED WITH A UL DESIGN SYSTEM AS SPECIFIED IN DIVISION 7 THROUGH PENETRATION RESISTANT MATERIAL. AFTER DEMOLITION OF EXISTING PARTITIONS, PATCH AND REPAIR EXISTING WALL TO MATCH EXISTING CONSTRUCTION AND PREPARE WALL FOR NEW FINISHES.
7. AFTER DEMOLITION OF EXISTING M.P.E. WORK, EQUIPMENT AND CASEWORK, PATCH AND REPAIR EXISTING WALLS TO MATCH EXISTING CONSTRUCTION AND PREPARE WALL FOR NEW FINISHES.
8. IF EXISTING CONSTRUCTION TO REMAIN IS DAMAGED BY THE REMOVAL OF EXISTING CONSTRUCTION OR ANY OTHER DEMOLITION ACTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR ALL EXISTING CONSTRUCTION TO MATCH EXISTING OR TO PRODUCE A SMOOTH SURFACE TO RECEIVE NEW FINISHES. ALL CONSTRUCTION TO REMAIN WHICH IS AFFECTED BY DEMOLITION SHALL BE PATCHED AND BE PROPERLY REINFORCED AND ALIGNED SO AS TO LEAVE NO EVIDENCE OF PATCHING OR REPAIR.

## DEMOLITION LEGEND



## DEMOLITION KEYNOTES

- D1 REMOVE TWO CEILING SYSTEM. IF PLASTER, NOTIFY ARCHITECT TO EVALUATE WHETHER TO REMAIN OR TO BE REMOVED.
- D2 DEMOLISH EXISTING EXTERIOR RAILING.
- D3 DEMOLISH WINDOW AND LOWER PRECAST PANEL REQUIRED FOR POOL ACCESS AND EGRESS.
- D4 EXISTING ELECTRIC ROOM, TO REMAIN. REFER TO ELECTRICAL DRAWINGS FOR EQUIPMENT.
- D5 SAY CUT NEW OPENING IN EXISTING EXTERIOR BRICK AND BLOCK WALLS AS REQUIRED TO INSTALL NEW DOOR AND FRAME. REFER TO STRUCTURAL DRAWINGS FOR LINTEL INFORMATION.
- D6 DEMOLISH EXISTING ROOFING AND PROTECT FLASHING. STEEL STRUCTURE TO REMAIN.
- D7 DEMOLISH EXISTING CONCRETE RAMP.
- D8 DEMOLISH EXISTING CONCRETE SLAB, METAL FENCE AND MECHANICAL UNIT.
- D9 DEMOLISH EXISTING FLOOR TO ORIGINAL WOOD FLOORING. PREPARE FOR REFINISH OF ORIGINAL WOOD FLOOR.
- D10 PROTECT EXISTING ROOF LEADERS, TYP.
- D11 DEMOLISH EXISTING CANOPY AND STRUCTURE.
- D12 DEMOLISH EXISTING COOLING SYSTEM. PATCH AND REPAIR HOLES IN BRICK TO MATCH EXISTING CONSTRUCTION TO PREVENT PENETRATION OF WATER.
- D13 DEMOLISH EXISTING HANDICAPPED PUSH PLATE AND SYSTEM ATTACHED TO DOOR.
- D14 REMOVE EXISTING HANDICAPPED PARKING SIGN FROM EXTERIOR OF BUILDING. PATCH AND REPAIR DAMAGE TO BRICK AND PRECAST PANELS TO MATCH EXISTING.
- D15 EXISTING SPOCKET TO REMAIN.
- D16 DEMOLISH EXISTING BUILDING SIGNS FROM EXTERIOR OF BUILDING. PATCH AND REPAIR DAMAGE TO BRICK AND PRECAST PANELS TO MATCH EXISTING.
- D17 EXISTING VENDING MACHINES TO BE REMOVED AND TURNED OVER TO THE VA.
- D18 EXISTING IT PANELS TO REMAIN. CONTRACTOR TO FIELD VERIFY SIZE AND LOCATION OF PANEL.
- D19 EXISTING SHAFT TO REMAIN.
- D20 FAN COIL UNIT TO BE DEMOLISHED. COORDINATE WITH HVAC DRAWINGS.
- D21 EQUIPMENT TO BE DISCONNECTED AND BROKEN DOWN FOR STORAGE AND REUSE. CONTRACTOR TO STORE IN A DRY, SAFE LOCATION FOR DURATION OF CONSTRUCTION.
- D22 EQUIPMENT TO BE REMOVED AND TURNED OVER TO THE VA.
- D23 PAINC BUTTONS TO BE DISCONNECTED AND STORED FOR REUSE.
- D24 DEMOLISH EXISTING ACCORDIAN DOOR AND HARDWARE. PATCH EXISTING EXTERIOR WALL AND PREPARE FOR NEW FINISHES.
- D25 DEMOLISH EXISTING CASEWORK.
- D26 DEMOLISH EXISTING ACUSTIC PANELS. PATCH AND REPAIR WALL TO RECEIVE NEW FINISHES.
- D27 REMOVE ALL EXISTING CURBICLE CURTAIN TRACKS WITHIN THE DEMOLITION AREA AND TURN OVER TO OWNER.
- D28 DEMOLISH EXISTING WALL MOUNTED FAN VENT. PATCH AND REPAIR EXTERIOR WALL TO MATCH EXISTING.
- D29 REMOVE EXISTING RECESSED DRINKING FOUNTAIN AND TURN OVER TO OWNER.
- D30 DEMOLISH EXISTING ADA GRAB BAR. PATCH EXISTING EXTERIOR WALL AND PREPARE FOR NEW FINISHES.
- D31 SAW CUT AND REMOVE EXISTING CONCRETE SLAB ON GRADE AS REQUIRED TO INSTALL BELOW SLAB MPE WORK. PATCH AND REPAIR SLAB AS PER CUTTING AND PATCHING SPECIFICATIONS SECTION. REFER TO STRUCTURAL FOR SIZE AND LOCATION.
- D32 EXISTING CAMERA & MOUNTING BRACKET TO BE RELOCATED. SEE OWNER FOR NEW LOCATION. EXTEND ALL WIRING TO NEW LOCATION. COORDINATE WITH OWNER, TYPICAL.
- D33 REMOVE EXISTING ELECTRICAL PANEL. INFILL WITH BLOCK WALL WHERE WALL REMAINS. PATCH AND REPAIR AND PREPARE FOR NEW FINISHES. SEE ELECTRICAL DRAWING FOR MORE INFORMATION.
- D34 DEMOLISH EXISTING LOWER AND INFILL WITH BLOCK TO MATCH EXISTING. PATCH AND REPAIR TO RECEIVE NEW FINISHES. COORDINATE WITH HVAC DRAWINGS.
- D35 REMOVE DOOR AND JAMB. PROVIDE STRUCTURAL BRACING AND SUPPORTS IF NECESSARY. PATCH AND REPAIR SURROUNDING WALL. PREPARE FOR NEW WALL INFILL.
- D36 PROVIDE DEPRESSED 2" SLAB X 2" X 2" FOR NEW FLOOR DRAINS COORDINATE WITH ARCHITECTURAL PLAN FOR EXACT LOCATIONS. REFER TO PLUMBING DRAWINGS FOR RELATED WORK IN THIS AREA.
- D37 POWER WASH EXISTING BRICK PANEL WHERE PANEL IS TO BE NEW INTERIOR WALL.
- D38 DEMOLISH EXISTING WALL AND HOSE HOOK UP. CAP OFF EXISTING PLUMBING. REFER TO PLUMBING DRAWINGS.
- D39 DEMOLISH EXISTING CERAMIC WALL AND FLOOR TILE AND GRIND SMOOTH.
- D40 DEMOLISH EXISTING AUTOMATIC DOOR OPERATOR.
- D41 EXISTING TRANSFORMER AND CONCRETE PAD. TO REMAIN.
- D42 PARTIALLY DEMOLISH EXISTING CONCRETE CURB AND RAMP TO INSTALL NEW CONCRETE STAIR.
- D43 DEMOLISH EXISTING COMPRESSED AIR HOSE AND CONNECTIONS. REMOVE ALL ACCESSORIES. PATCH AND REPAIR DAMAGE TO EXISTING BRICK WALL TO MATCH EXISTING. COORDINATE WITH MEP DEMOLITION DRAWINGS.
- D44 ALL PLUMBING LINES TO BE DEMOLISHED BY SAWCUTTING. REFER TO PLUMBING STRUCTURAL ENGINEER FOR PIPES AND LOCATIONS, TYP.
- D45 EXISTING INSULATED CHILLER SUPPLY AND RETURN PIPES, TO REMAIN.
- D46 DEMOLISH EXISTING COPIING.

## DEMOLITION GENERAL NOTES

1. DEMOLITION IS INTENDED TO PREPARE THE BUILDING TO RECEIVE THE NEW WORK. THE INFORMATION PROVIDED IN NO WAY INTENDS TO MEAN THAT DEMOLITION IS LIMITED ONLY TO THOSE AREAS SPECIFICALLY IDENTIFIED. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO EXECUTE DEMOLITION WORK AS REQUIRED TO ALLOW THE EXECUTION OF NEW WORK. REMOVE ALL EXISTING ITEMS OF CONSTRUCTION AND EQUIPMENT WITHIN THE PROJECT AREA INDICATED ON DEMOLITION PLAN. UNLESS SHOWN OR NOT, INCLUDING, BUT NOT LIMITED TO FLOOR MATERIAL, BASE, WALLS, CEILINGS, DOORS, DOOR FRAMES, CASEWORK, ELECTRICAL, MECHANICAL, PLUMBING FIXTURES AND SYSTEMS, AS REQUIRED TO ACCOMMODATE NEW CONSTRUCTION. ANY EXISTING WORK TO REMAIN, IF DAMAGED BY ANY TRADE OR NEW CONSTRUCTION, SHALL BE PATCHED, REPAIRED OR REPLACED TO MATCH EXISTING. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS REGARDING DEMOLITION AND ALTERATION PROCEDURES.
2. ALL NON-BUILT IN EXISTING MEDICAL EQUIPMENT, STORAGE UNITS AND FURNITURE, WILL BE REMOVED BY OWNER. REMOVAL OF SUPPORTS, TRACKS, BUILT IN ITEMS, STORAGE CABINETS, CASEWORK, ETC. WILL BE THE RESPONSIBILITY OF THE CONTRACTOR, ALONG WITH THE NORMAL DEMOLITION WORK. REMOVE AND TURN OVER TO OWNER FOR STORAGE ANY ANGLIARY PIECES SUCH AS (BUT NOT LIMITED TO) MOUNTING BRACKETS, HARDWARE, MISC. SUPPORTS ITEMS, ETC. REQUIRED FOR THE REINSTALLATION OF EQUIPMENT. CONTRACTOR TO SEE EQUIPMENT BOOK FOR INFORMATION ON PLACEMENT INSTALLATION OF EXISTING AND NEW EQUIPMENT.
3. ALL DEMOLISHED ITEMS ARE TO BE REMOVED IN THEIR ENTIRETY INCLUDING ALL ASSOCIATED PIPING, WIRING, HANGERS, SUPPORTS, PROJECTIONS, BOLT WALLS, ETC. FROM EXISTING SURFACES. PATCH ALL HOLES TO MATCH ADJACENT SURFACES OR PROVIDE NEW FINISHES PER FINISH PLAN.
4. ALL STRUCTURAL INTERFERENCE OR STRUCTURAL WALLS, BEAMS, JOIST, COLUMNS, ETC. SHALL BE BROUGHT TO THE ATTENTION OF ARCHITECT FOR DECISION. NO FLOOR OR STRUCTURAL MEMBERS SHALL BE CUT WITHOUT PERMISSION OF A REGISTERED STRUCTURAL ENGINEER. ALL PROPOSED SLEEVE CORING SHALL BE REVIEWED BY ARCHITECT.
5. REMOVE COMPLETELY ALL EXISTING FLOOR FINISHES AND ADHESIVE DOWN TO THE CONCRETE SLAB. LEAVE FLOOR SMOOTH FOR NEW FINISH. OBSERVE MANUFACTURER'S REQUIREMENTS FOR SUB-FLOOR PREPARATION. TREATMENT OF EXISTING FLOOR FINISHES WITHIN AREAS OF DEMOLITION SHALL BE AS FOLLOWS:
  - A. CARPET: REMOVE ENTIRELY, INCLUDING PADDING. REMOVE. REMAINING GLUE RESIDUE AND PATCH AS NECESSARY FOR NEW FLOOR FINISH.
  - B. VINYL: REMOVE ENTIRELY AFTER MATERIAL HAS BEEN TESTED FOR ASBESTOS. REMOVE GLUE OR GROUT RESIDUE. PATCH AS NECESSARY TO PROVIDE LEVEL SURFACE.
  - C. CERAMIC TILE: REMOVE ENTIRELY. PATCH AND REPAIR FLOORS WITH A LATEX LEVELING COMPOUND TO PRODUCE A SMOOTH, LEVEL SURFACE TO RECEIVE NEW FINISHES.
6. REMOVE ALL EXISTING WALLS TO RECEIVE NEW FINISHES ARE TO HAVE EXISTING FINISHES, INCLUDING CERAMIC TILE, VINYL, WALL COVERING, ETC. COMPLETELY REMOVED UNLESS NOTED OTHERWISE. REMOVE COMPLETELY ALL EXISTING WALL BASE AND ADHESIVE AS REQUIRED FOR NEW WALL BASE. LEAVE WALL SURFACE SMOOTH TO RECEIVE NEW FINISH. SEE FINISH DRAWINGS AND/OR SCHEDULE.
7. WHERE NEW CEILINGS ARE INDICATED, REMOVE ALL EXISTING CEILINGS TO ALLOW FOR PROPER INSTALLATION OF NEW CEILINGS. PATCH AND REPAIR EXISTING WALLS AS REQUIRED TO INSTALL NEW FINISHES.
8. REFER TO MECHANICAL, PLUMBING, FIRE PROTECTION AND ELECTRICAL DOCUMENTS FOR REQUIRED DEMOLITION WORK AS WELL AS EXISTING PIPING, CONDUITS, DUCTWORK, ETC. TO REMAIN WITHIN AREAS OF DEMOLITION.
9. COORDINATE DEMOLITION WORK WITH PHASING PLAN TO DETERMINE THE SCOPE WORK TO BE PERFORMED IN EACH PHASE AND TO CAREFULLY INTEGRATE WITH EXISTING CONSTRUCTION TO REMAIN FOR EACH PHASE AND UPON COMPLETION OF FINAL PHASE WITH MINIMAL DISRUPTION OF BUILDING OPERATIONS.
10. ALL COLUMN ENCLOSURES TO BE DEMOLISHED AND PREPARED FOR NEW ENCLOSURES.
11. DEMOLISH ALL DRAPERIES AND WALL HARDWARE EXCEPT ROLLER SHADES. PATCH AND REPAIR EXTERIOR WALL TO RECEIVE NEW FINISHES.
12. ALL CONSTRUCTION TO REMAIN WHICH IS AFFECTED BY DEMOLITION SHALL BE PATCHED, PLASTERED AND BE PROPERLY MEMBERED AND ALIGNED SO AS TO LEAVE NO EVIDENCE OF PATCHING OR REPAIR.
13. REMOVE ALL EXISTING CHAIR RAIL, BORDER TRIM AND WALL PROTECTION WITHIN PROJECT AREA. PATCH AND REPAIR EXISTING WALLS AS REQUIRED TO RECEIVE NEW FINISHES.
14. REMOVE ALL EXISTING DOORS AND HARDWARE, FLOOR AND WALL MOUNTED DOOR STOPS, WITHIN THE PROJECT AREA AND PREPARE EXISTING FRAMES FOR NEW DOORS.
15. REMOVE ALL ITEMS MARKED-UP BY THE OWNER AS OWNER'S SALVAGE. TRANSPORT ITEMS TO OWNER'S DESIGNATED STORAGE AREA(S).

## GENERAL CONTRACTOR RESPONSIBILITIES WITH REGARD TO EXISTING CONDITIONS NOTES

1. THE CONTRACTOR OR CONSTRUCTION MANAGER AND AFFECTED SUBCONTRACTORS SHALL VISIT THE PROJECT SITE PRIOR TO SUBMITTING A BID PROPOSAL. THE CONTRACTOR SHALL BECOME GENERALLY FAMILIAR WITH THE PROJECT, AND WITH THE IMPACT OF THE NEW WORK ON THE EXISTING CONDITIONS. ANY AREAS OF CONCERN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO SUBMITTING A BID PROPOSAL.
2. INFORMATION CONTAINED ON THESE DRAWINGS WITH REGARD TO EXISTING CONDITIONS OF CONSTRUCTION (PROVIDED) FOR THE CONVENIENCE OF THE GENERAL CONTRACTOR IN EXECUTING THE NEW WORK. EVERY ATTEMPT HAS BEEN MADE TO PROVIDE COMPLETE AND ACCURATE REPRESENTATION OF SUCH EXISTING CONDITIONS. THIS INTERPRETATION HAS BEEN TAKEN FROM DRAWINGS SUPPLIED BY OWNER AND HAS BEEN FURTHER SUPPLEMENTED WITH FIELD MEASUREMENTS AND OBSERVATIONS. THE INFORMATION CONTAINED IN THESE DRAWINGS, WITH REGARD TO THE EXISTING CONDITIONS OF CONSTRUCTION IN NO WAY RELEASES THE GENERAL CONTRACTOR FROM THE RESPONSIBILITY FOR VERIFYING COMPLETELY ALL FIELD CONDITIONS RELATING TO THE EXECUTION OF THE WORK, AS DESCRIBED IN THESE CONTRACT DOCUMENTS. THE GENERAL CONTRACTOR TO FIELD VERIFY AND DOCUMENT ALL EXISTING DIMENSIONS, ELEVATIONS AND BENCHMARKS, MATERIALS AND METHODS OF CONSTRUCTION THAT MAY AFFECT OR BE AFFECTED BY NEW WORK, AND TO COORDINATE SUCH FIELD VERIFICATION WITH THE CONTRACT DOCUMENTS AND THE EXECUTION OF THE WORK. NOTE ANY DISCREPANCIES AND/OR CONFLICTS INVOLVING EXISTING CONDITIONS AND BRING THEM TO THE ARCHITECT'S ATTENTION IMMEDIATELY.
3. FIELD VERIFICATION OF EXISTING CONDITIONS RELATED TO SPECIFIC PORTIONS OF THE WORK SHALL BE UNDERTAKEN IN ADVANCE TO ALLOW FOR THE TIMELY IDENTIFICATION OF EXISTING CONDITIONS THAT MAY AFFECT THE SCHEDULED INSTALLATION OF NEW WORK AS DESIGNED AND DETAIL, AND TO AVOID UNIQUE AND UNREASONABLE DELAYS TO THE PROJECT SHOULD SUCH CONDITIONS BE DISCOVERED. TIMELY IDENTIFICATION OF SUCH CONDITIONS SHALL PROVIDE FOR A MINIMUM PERIOD OF TEN (10) WORKING DAYS DURING WHICH TIME THE ARCHITECT WILL EVALUATE THE CONDITIONS AND MAKE RECOMMENDATIONS FOR ACCOMMODATING NEW WORK.
4. THE AREAS ADJACENT TO THE PROJECT ARE CURRENTLY OCCUPIED, AND MUST REMAIN COMPLETELY OPERATIONAL DURING THEIR NORMAL BUSINESS HOURS. COORDINATE WITH THE OWNER ANY CONSTRUCTION ACTIVITIES WHICH MAY IMPEDER THEIR NORMAL OPERATIONS, INCLUDING ANY ACTIVITY WHICH CREATES EXCESSIVE NOISE. NOTIFY ANY OCCUPANTS OF THE BUILDING OF ANY CONSTRUCTION ACTIVITIES WHICH MAY AFFECT THEIR ABILITY TO OPERATE NORMALLY.
5. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO IDENTIFY POINTS OF ACCESS TO THE BUILDING AND TO VERIFY MINIMUM CLEARANCES AVAILABLE FOR USE IN TRANSPORTING NECESSARY CONSTRUCTION MACHINERY, EQUIPMENT, MATERIALS, AND COMPONENTS INTO THE BUILDING. USE OF SUCH POINTS OF ACCESS SHALL BE APPROVED BY THE OWNER.
6. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR OR CONSTRUCTION MANAGER TO IDENTIFY EXISTING COMPONENTS AND ASSEMBLIES WITHIN THE BUILDING THAT ARE CONSTRUCTED AS FIRE-RATED ASSEMBLIES. NOTE ANY DISCREPANCIES AND/OR CONFLICTS INVOLVING EXISTING CONDITIONS AND BRING THEM TO THE ARCHITECT'S ATTENTION IMMEDIATELY.
7. CONTRACTOR TO MAINTAIN ALL MEANS OF EGRESS FOR DURATION OF CONSTRUCTION. WORK INCLUDES CONSTRUCTION OF FIRE RATED, DUST PROOF TEMPORARY PARTITIONS, AND COVERED WALKS TO PUBLIC WAY AS REQUIRED BY REGULATIONS AND BUILDING CODES.
8. CONTRACTOR SHALL AT ALL TIMES MAINTAIN THE BUILDING IN A WEATHER TIGHT CONDITION.
9. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT DAMAGE TO OWNER OCCUPIED AREAS ADJACENT TO NEW CONSTRUCTION OR OCCUPIED AREAS WHERE VARIOUS SYSTEM CONNECTIONS OR EXTENSIONS ARE REQUIRED AND IS RESPONSIBLE FOR DAMAGE CAUSED BY CONTRACTOR'S SUB CONTRACTOR, OR ADVERSE WEATHER CONDITIONS, INCLUDING RAIN AND WIND.

## INSTRUCTIONS TO BIDDERS

REMOVAL OF ASBESTOS CONTAINING MATERIALS AND MASTIC SHALL BE BID BY IDENTIFYING UNIT PRICING FOR EACH.

NOTE: SEE SHEET AE-002 FOR DEDUCT ALTERNATES ISSUED FOR BID

FULLY SPRINKLERED

ISSUED FOR BID

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Project Number  
3627

Scale  
As indicated

Drawing Title

FIRST FLOOR DEMOLITION PLAN

Approved: Project Director

Project Title

RENOVATE BUILDING 69

Location  
1400 Black Horse Hill, Coatesville, PA

Date  
03-29-13

Checked  
TN

Drawn  
BG

VA Project Number

542-CSI-203

Building Number

69

Drawing Number

AD110

Dwg. 14 of 86

Office of Facilities Management

Department of Veterans Affairs

F1 FIRST FLOOR - DEMOLITION PLAN  
1/8" = 1'-0"

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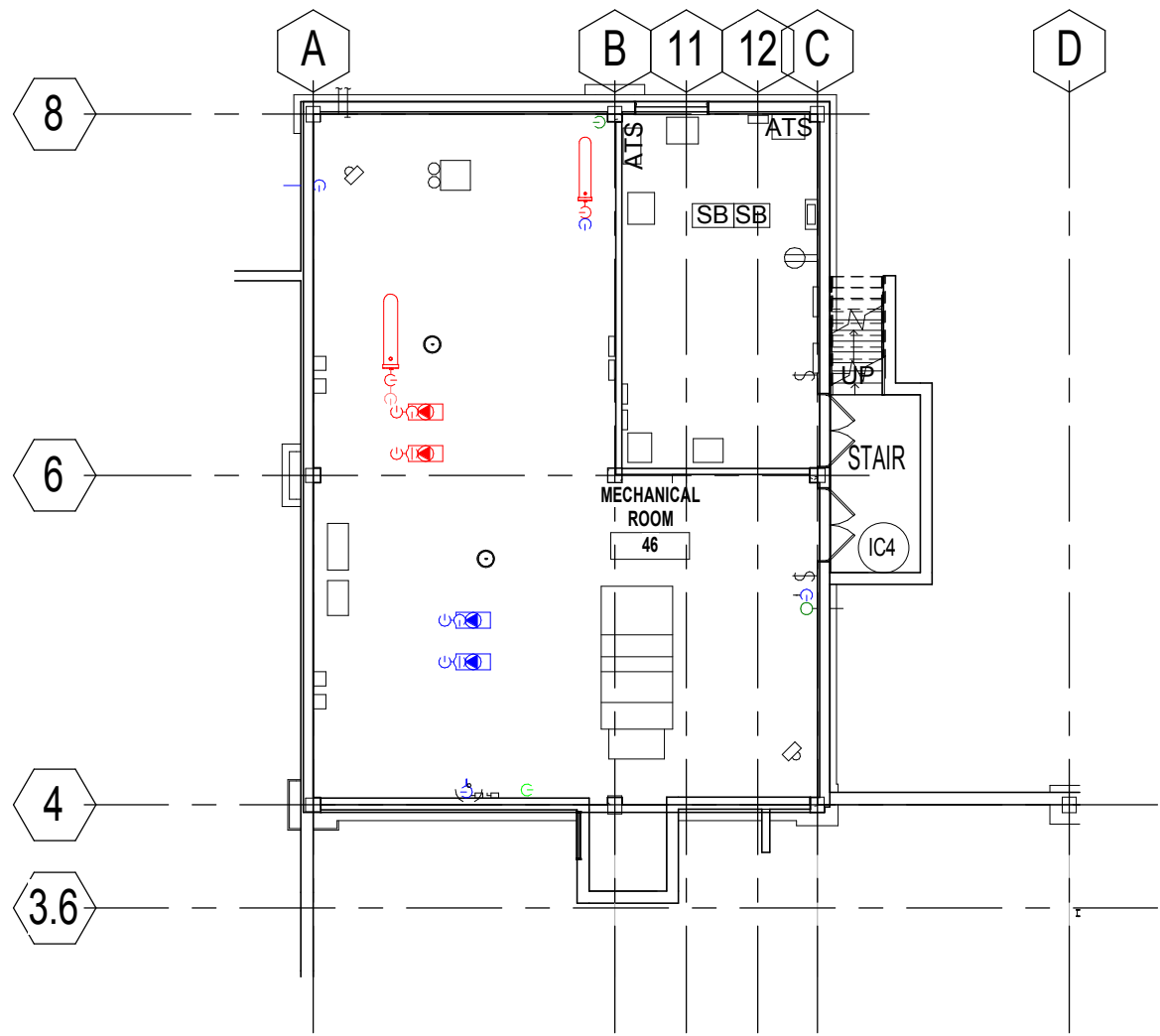
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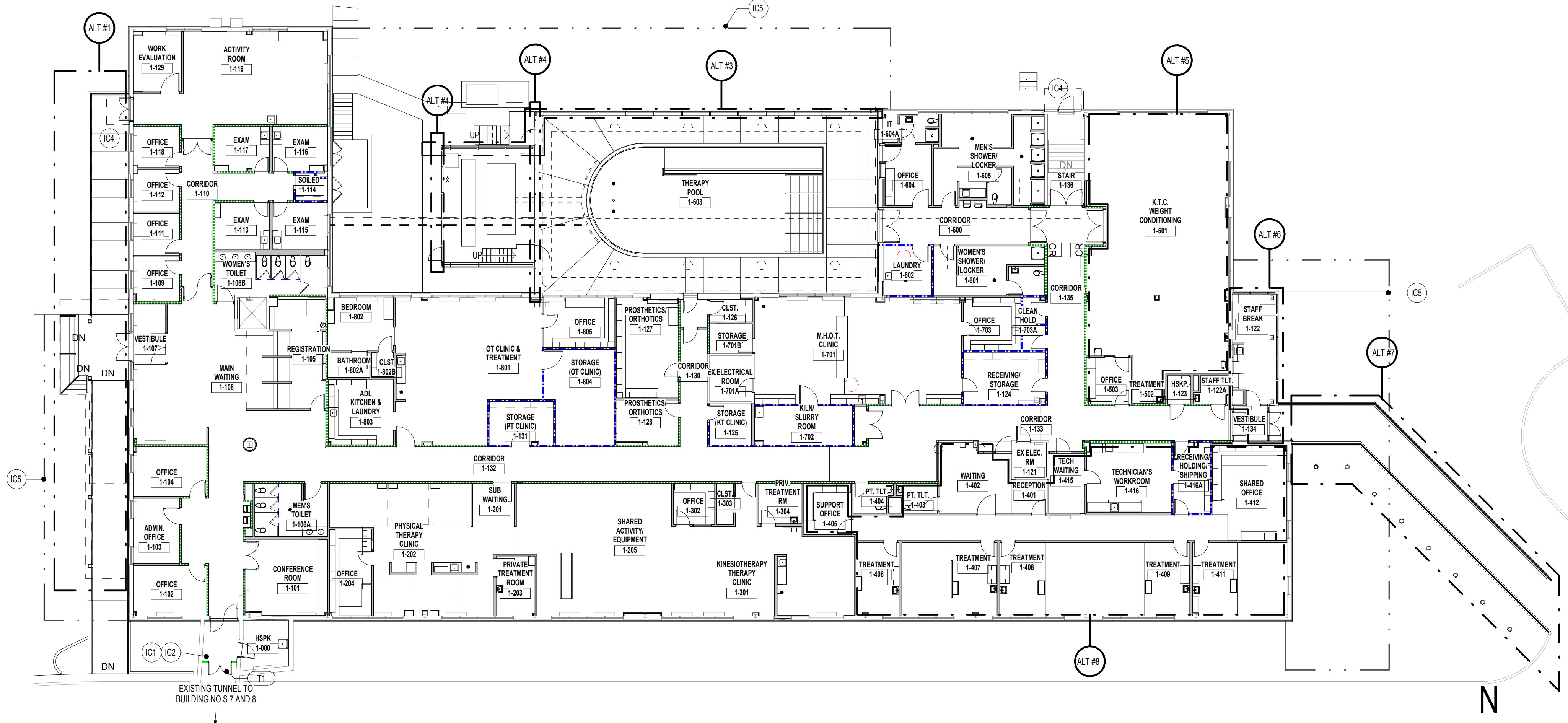
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C1 BASEMENT PHASING AND ICRA PLAN  
1/16" = 1'-0"



F1 FIRST FLOOR PHASING, ICRA AND ALTERNATES PLAN  
1/16" = 1'-0"

## ICRA GENERAL NOTES

1. PROVIDE INFECTION CONTROL PRECAUTIONS / CONTAINMENT SYSTEM AS REQUIRED BY HOSPITAL INFECTION CONTROL REPRESENTATIVE FOR ALL AREAS OUTSIDE THE LIMIT OF WORK.

## ICRA AND PHASING KEYNOTES

- (IC1) PROVIDE TEMPORARY CONSTRUCTION/INFECTION VESTIBULE PER PARTITION TYPE SEE SHEET AE021. PARTITION TO EXTEND TO UNDERSIDE OF DECK
- (IC2) PROVIDE TEMPORARY DOOR WITH GASKETING TO PREVENT THE MOVEMENT OF DUST.
- (IC3) NOT USED.
- (IC4) CLOSE AND LOCK DOOR TO PREVENT THE MOVEMENT OF DUST.
- (IC5) PROVIDE METAL CHAINLINK FENCE AND GATE TO CONTAIN CONSTRUCTION ZONE. MOUNT VIA SIGNAGE REQUIREMENTS PER DETAILS F00001 AND F4/G001. REFER TO CIVIL DRAWINGS FOR MORE INFORMATION.

## DEDUCT ALTERNATES

- ALT #1 ALTERNATE NO. 1. WEST ENTRANCE CANOPY PROJECT TO INCLUDE ALL WORK EXCEPT:  
EPDM roof on tapered insulation on ribbed metal deck (exposed below) painted on steel frame (exposed and painted) on 3 ft deep concrete footings (see structural). Provide metal panel fascia (similar to new East side, ALT. No. 6). Resident roof topping slab under canopy to include entrance side, stairs and ramp.
- ALT #3 ALTERNATE NO. 3. BRICK WEARING FACE ON NEW RETAINING WALL PROJECT TO INCLUDE ALL WORK EXCEPT:  
Add one (1) wythe brick to proposed concrete retaining wall at North wall of Pool Equipment Room and West and North walls of Pool Enclosure Base.
- ALT #4 ALTERNATE NO. 4. BRICK GABLE END WALL PROJECT TO INCLUDE ALL WORK EXCEPT:  
Replace proposed polycarbonate envelope at West end with one (1) wythe brick exterior and one (1) wythe brick grille interior on each side of reinforced 8" CMU wall with vent. Bond beam at 12' AFF. Provide 2" rigid insulation at exterior side of CMU.
- ALT #5 ALTERNATE NO. 5. WEIGHT CONDITIONING FIT OUT PROJECT TO INCLUDE ALL WORK EXCEPT:  
Provide all interior walls, flooring, and finishes for W.T. Suite. Area to include electrical and plumbing fixtures and connections.
- ALT #6 ALTERNATE NO. 6. STAFF BREAK ROOM & EAST ENTRY VESTIBULE PROJECT TO INCLUDE ALL WORK EXCEPT:  
EPDM roof on tapered insulation on ribbed metal deck on existing steel channel frame. Provide aluminum storefront window system enclosure. Provide metal panel fascia and soffit. Provide second set of storefront entrance doors. See document set for plans, sections, exterior elevations, and interior finishes.
- ALT #7 ALTERNATE NO. 7. EAST ENTRANCE RAMP AND WALL PROJECT TO INCLUDE ALL WORK EXCEPT:  
Provide 10" reinforced concrete wall at North and Northeast sides of new entrance ramp. Provide 5" deep by 8" wide sidewalk on compacted fill with turned down edge at South and Southwest sides. Provide 2.5" OD painted steel pipe rail with stainless steel mesh infill on top of new concrete wall (rail and mesh one side only). See document set for plan, sections, and exterior elevations.
- ALT #8 ALTERNATE NO. 8. AUDIOLOGY FITOUT PROJECT TO INCLUDE ALL WORK EXCEPT:  
Provide interior walls, flooring, and finishes for Audiology Suite. Area to include electrical and plumbing fixtures and connections.
- ALT #9 ALTERNATE NO. 9. VENTILATION DUCTWORK PROJECT TO INCLUDE ALL WORK EXCEPT:  
Provide ventilation supply and exhaust ductwork demolition and installation.

## INFECTION CONTROL RISK MITIGATION RECOMMENDATIONS MATRIX OF PRECAUTIONS FOR CONSTRUCTION AND RENOVATION

Type of Construction / Project Activity Table	
TYPE A	Inspection and Non-Invasive Activities Includes, but is not limited to: - removal of ceiling tiles for visual inspection limited to 1 tile to 50 square feet - painting (but not sanding) wall covering - electrical trim work, minor plumbing, and activities which do not generate dust or require cutting of walls or access to ceilings other than for visual inspection
TYPE B	Small scale, short duration activities which create minimal dust Includes, but is not limited to: - installation of telephone and computer cabling - access to chase spaces - cutting of walls or ceiling where dust migration can be controlled
TYPE C	Work that generates a moderate to high level of dust or requires demolition or removal of any fixed building components or assemblies Includes, but is not limited to: - sanding of walls for painting or wall covering - removal of floor coverings, ceiling tiles and casework - new wall construction - minor duct work or electrical work above ceilings - major cabling activities - any activity which cannot be completed within a single work shift
TYPE D	Major demolition and construction projects Includes, but is not limited to: - activities which require consecutive work shifts - requires heavy demolition or removal of a complete ceiling system - new construction

## Patient Risk Group Table

Group 1 Low Risk	Group 2 Medium Risk	Group 3 High Risk	Group 4 Highest Risk
- Office areas (non-clinical)	- Cardiology - Endocrinology - Endoscopy - GI - Physical Therapy - Radiology/MRI - Nuclear Medicine - Respiratory Care (except bronchoscopies area) - Catheters - Outpatient areas- clinics and offices (exception: transplant and oncology)	- Emergency Room - Labor and Delivery - Anesthesia and Pump areas - Central Equipment/Sterile Supply - Pediatric - Admission/Discharge area - Laboratories - Radiation Oncology - All Intensive Care Units - Newborn Nurseries, including NICU - Dialysis Unit - Oncology - inpatient & outpatient - Transplant - inpatient & outpatient - Pharmacy Ambulatory - Negative Pressure Isolation Rooms/areas (including bronchoscopies area)	- All Operating Rooms including Labor and Delivery - Anesthesia and Pump areas - Central Equipment/Sterile Supply - Cardiac Catheterization and Angiography Areas - Interventional Radiology - Radiation Oncology - All Intensive Care Units - Newborn Nurseries, including NICU - Dialysis Unit - Oncology - inpatient & outpatient - Transplant - inpatient & outpatient - Pharmacy Ambulatory - Negative Pressure Isolation Rooms/areas (including bronchoscopies area)

## Infection Control Matrix - Class of Precautions: Construction Project by Patient Risk Construction Project Type

Patient Risk Group	TYPE A	TYPE B	TYPE C	TYPE D
LOW Risk Group 1	I	II	II	III/IV
MEDIUM Risk Group 2	I	II	III	IV
HIGH Risk Group 3	I	III	III/IV	IV
HIGHEST Risk Group 4	III	III/IV	III/IV	IV

Note: Infection Control approval will be required when the Construction Activity and Risk Level indicate that Class III or Class IV control procedures are necessary.

## It is the Contractor's Responsibility to provide the following Infection Control Precautions depending upon the Area Class Designation

	During Construction Project	Upon Completion of Project
CLASS I	1. Execute work by methods to minimize raising dust from construction operations. 2. Immediately replace a ceiling tile displaced for visual inspection.	1. Wipe surfaces to remove dust.
CLASS II	1. Includes all activities required by Class I 2. Provide active means to prevent airborne dust from dispersing into atmosphere. 3. Water mist work surfaces to control dust while cutting. 4. Seal unused doors with dust tape. 5. Stock off and seal air vents. 6. Replace adhesive walk-off mats at entrance and exit of work area. Replace used mats in accordance with manufacturer's recommendations. 7. Remove or isolate HVAC system in areas where work is being done to prevent contamination of duct system.	1. Wipe work surfaces with disinfectant. 2. Contain construction waste before transport in tightly covered containers. 3. Wet mop and/or vacuum work areas with HEPA filtered vacuum before leaving work areas. 4. Remove isolation of HVAC system in areas where work is being performed.
CLASS III	1. Includes all activities required by Class II 2. Obtain Infection Control Permit from Hospital Safety Officer or Facilities Management Maintenance and Engineering department before construction begins. 3. Remove or isolate HVAC system in areas where work is being done to prevent contamination of duct system. 4. Complete all critical barriers before construction begins or implement control cube method. 5. Maintain negative air pressure within work site utilizing HEPA-equipped air filtration units. 6. Contain construction waste before transport in tightly covered containers. 7. Cover transport receptacles or carts. Tape covers. 8. Wet mop and/or vacuum with HEPA filtered vacuum before leaving work areas. 9. Remove isolation of HVAC system in areas where work is being performed.	1. Remove barrier materials carefully to minimize spreading of dirt and debris associated with construction. 2. Contain construction waste before transport in tightly covered containers. 3. Cover transport receptacles or carts. Tape covering. 4. Vacuum work area with HEPA filtered vacuums. 5. Wet mop area with disinfectant after barriers are removed. 6. Remove or isolate HVAC system in areas where work is being performed.
CLASS IV	1. Includes all activities required by Class III 2. Obtain Infection Control Permit from Hospital Safety Officer or Facilities Management Maintenance and Engineering department before construction begins. 3. Isolate HVAC system in areas where work is being done to prevent contamination of duct system. 4. Complete all critical barriers or implement control cube method before construction begins. 5. Maintain negative air pressure within work site utilizing HEPA equipped air filtration units. 6. Seal holes, pipes, conduits, and purchases appropriately. 7. Construct anteroom and require all personnel to pass through this room so they can be vacuumed using a HEPA vacuum cleaner before leaving work site or they can wear cloth or paper coveralls that is removed each time they leave the work site. 8. All personnel entering work site are required to wear shoe covers. Shoe covers must be changed each time the worker exits the work area. 9. Place adhesive walk-off mats at entrance to work area within anteroom. 10. Replace per manufacturer's recommendations. Do not remove barriers from work area until completed project is inspected each by the Hospital Safety Officer, Facilities Management Maintenance and Engineering Department and thoroughly cleaned by the Hospital Environmental Services Department or their contracted Environmental Service Company. Contain construction waste before transport in tightly covered containers. 11. Cover transport receptacles or carts. Tape covering. 12. Vacuum work area with HEPA filtered vacuums. 13. Wet mop with disinfectant after barriers are removed. 14. Remove isolation of HVAC system in areas where work is being performed.	1. Remove barrier materials carefully to minimize spreading of dirt and debris associated with construction. 2. Contain construction waste before transport in tightly covered containers. 3. Cover transport receptacles or carts. Tape covering. 4. Vacuum work area with HEPA filtered vacuums. 5. Wet mop area with disinfectant after barriers are removed. 6. Remove or isolate HVAC system in areas where work is being performed.

FULLY SPRINKLERED

NOTE: SEE SHEET AE-002 FOR DEDUCT ALTERNATES ISSUED FOR BID

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## PROJECT MANAGER:

**Bray Mooney Consulting**

Project Number 3627 Scale As indicated

Drawing Title FIRST FLOOR PHASING, ICRA AND ALTERNATES PLAN

Approved: Project Director

Project Title RENOVATE BUILDING 69

Location 1400 Black Horse Hill, Coatesville, PA

Date 03-29-13

Checked TN

Drawn BG

VA Project Number 542-CSI-203

Building Number 69

Drawing Number AE002

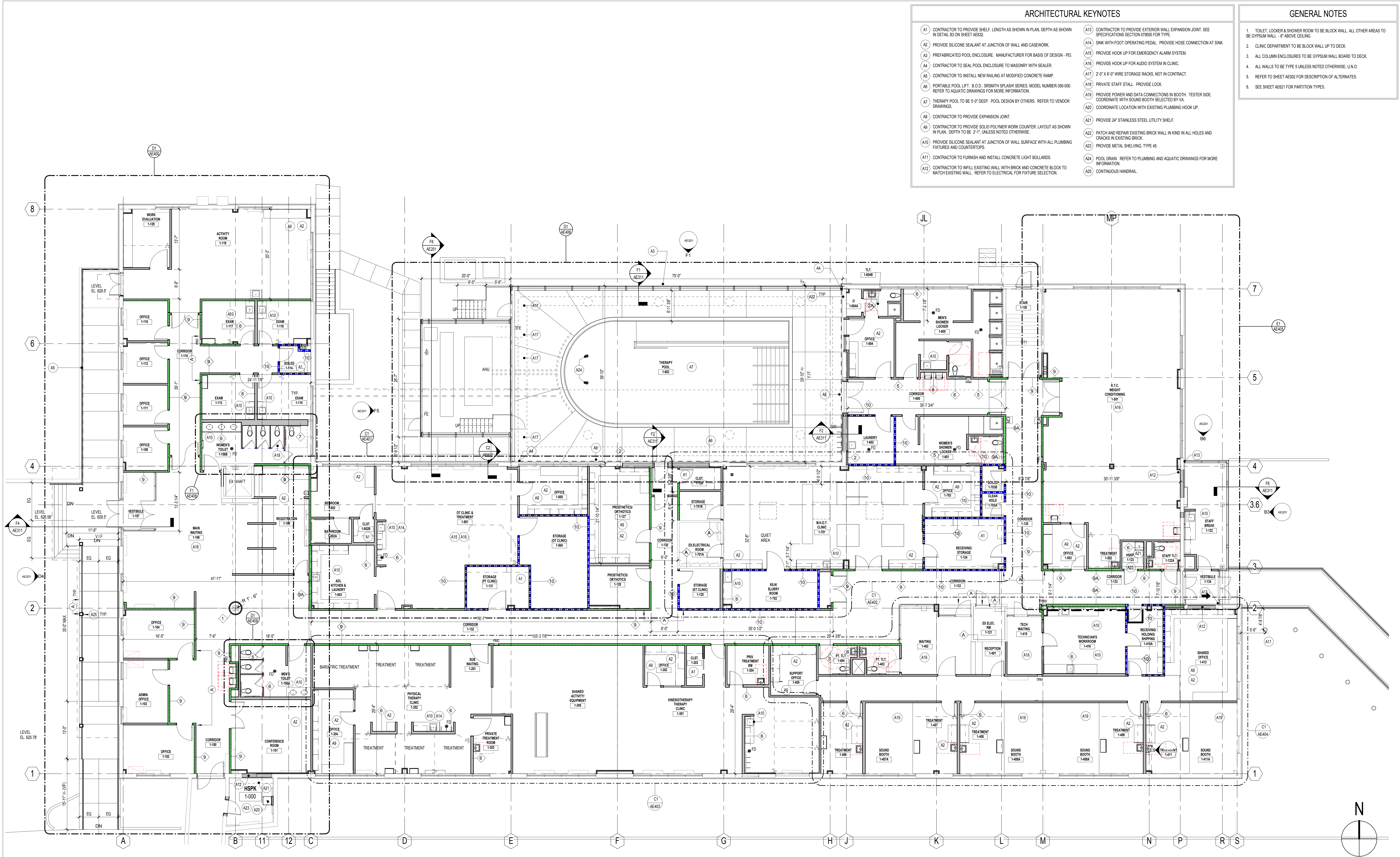
Dwg. 15 of 86

Office of Facilities Management

Department of Veterans Affairs



three inches = one foot  
one and one half inches = one foot  
one inch = one foot  
three quarters inch = one foot  
one half inch = one foot  
three eighths inch = one foot  
one quarter inch = one foot  
one eighth inch = one foot  
one sixteenth inch = one foot



- ### ARCHITECTURAL KEYNOTES
- A1 CONTRACTOR TO PROVIDE SHELF, LENGTH AS SHOWN IN PLAN, DEPTH AS SHOWN IN DETAIL B3 ON SHEET AE02.
  - A2 PROVIDE SILICONE SEALANT AT JUNCTION OF WALL AND CASEWORK.
  - A3 PREFABRICATED POOL ENCLOSURE, MANUFACTURER FOR BASIS OF DESIGN - PEI.
  - A4 CONTRACTOR TO SEAL POOL ENCLOSURE TO MASONRY WITH SEALER.
  - A5 CONTRACTOR TO INSTALL NEW RAILING AT MODIFIED CONCRETE RAMP.
  - A6 PORTABLE POOL LIFT, B.O.D. SMOOTH SPLASH SERIES, MODEL NUMBER 390-000, REFER TO AQUATIC DRAWINGS FOR MORE INFORMATION.
  - A7 THERAPY POOL TO BE 5'-0" DEEP, POOL DESIGN BY OTHERS, REFER TO VENDOR DRAWINGS.
  - A8 CONTRACTOR TO PROVIDE EXPANSION JOINT.
  - A9 CONTRACTOR TO PROVIDE SOLID POLYMER WORK COUNTER, LAYOUT AS SHOWN IN PLAN, DEPTH TO BE 2'-0", UNLESS NOTED OTHERWISE.
  - A10 PROVIDE SILICONE SEALANT AT JUNCTION OF WALL SURFACE WITH ALL PLUMBING FIXTURES AND COUNTERTOPS.
  - A11 CONTRACTOR TO FURNISH AND INSTALL CONCRETE LIGHT BOLLARDS.
  - A12 CONTRACTOR TO INFILL EXISTING WALL WITH BRICK AND CONCRETE BLOCK TO MATCH EXISTING WALL, REFER TO ELECTRICAL FOR FIXTURE SELECTION.
  - A13 CONTRACTOR TO PROVIDE EXTERIOR WALL EXPANSION JOINT, SEE SPECIFICATIONS SECTION 07600 FOR TYPE.
  - A14 SINK WITH FOOT OPERATING PEDAL, PROVIDE HOSE CONNECTION AT SINK.
  - A15 PROVIDE HOOK UP FOR EMERGENCY ALARM SYSTEM.
  - A16 PROVIDE HOOK UP FOR AUDIO SYSTEM IN CLINIC.
  - A17 2'-0" X 6'-0" WIRE STORAGE RACKS, NOT IN CONTRACT.
  - A18 PRIVATE STAFF STALL, PROVIDE LOCK.
  - A19 PROVIDE POWER AND DATA CONNECTIONS IN BOOTH, TESTER SIDE, COORDINATE WITH SOUND BOOTH SELECTED BY VA.
  - A20 COORDINATE LOCATION WITH EXISTING PLUMBING HOOK UP.
  - A21 PROVIDE 24" STAINLESS STEEL UTILITY SHELF.
  - A22 PATCH AND REPAIR EXISTING BRICK WALL IN KIND IN ALL HOLES AND CRACKS IN EXISTING BRICK.
  - A23 PROVIDE METAL SHELVING, TYPE 45.
  - A24 POOL DRAIN, REFER TO PLUMBING AND AQUATIC DRAWINGS FOR MORE INFORMATION.
  - A25 CONTINUOUS HANDRAIL.

- ### GENERAL NOTES
- TOILET, LOCKER & SHOWER ROOM TO BE BLOCK WALL, ALL OTHER AREAS TO BE GYPSUM WALL - 8" ABOVE CEILING.
  - CLINIC DEPARTMENT TO BE BLOCK WALL UP TO DECK.
  - ALL COLUMN ENCLOSURES TO BE GYPSUM WALL BOARD TO DECK.
  - ALL WALLS TO BE TYPE 5 UNLESS NOTED OTHERWISE, U.N.O.
  - REFER TO SHEET AE02 FOR DESCRIPTION OF ALTERNATES.
  - SEE SHEET AE02 FOR PARTITION TYPES.

F1 FIRST FLOOR  
1/8" = 1'-0"

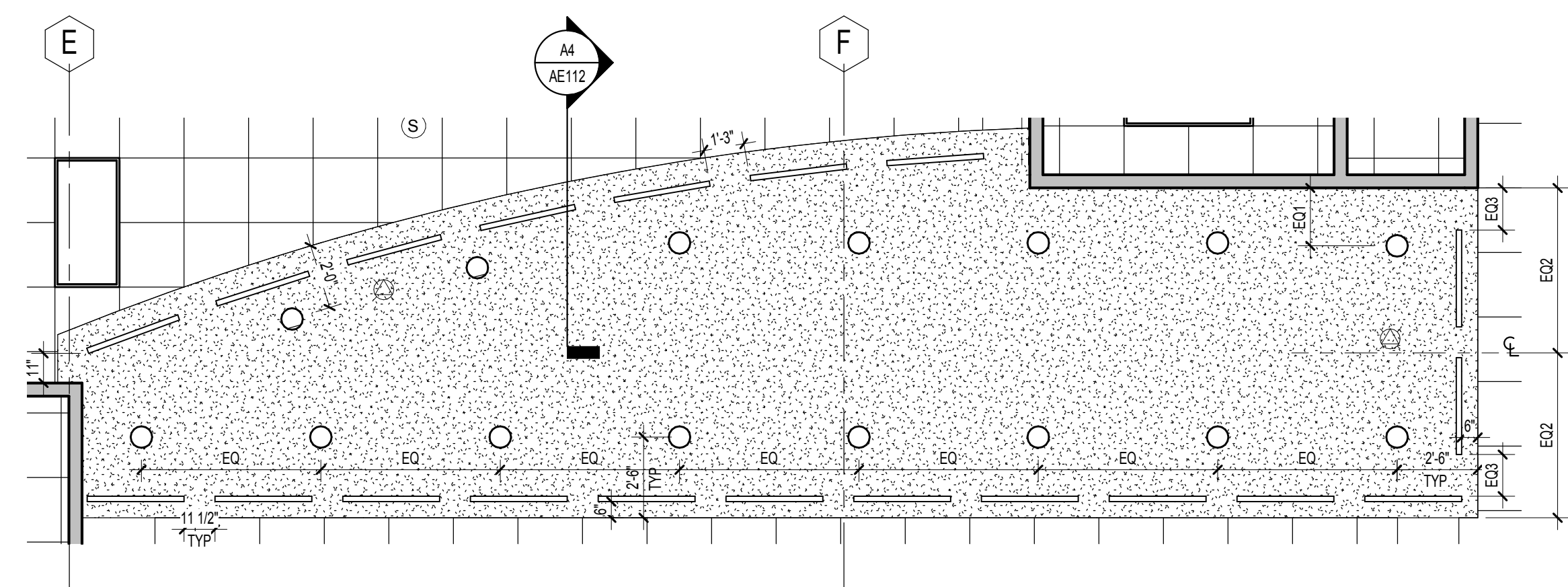
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NOTE: SEE SHEET AE-002 FOR DEDUCT ALTERNATES ISSUED FOR BID

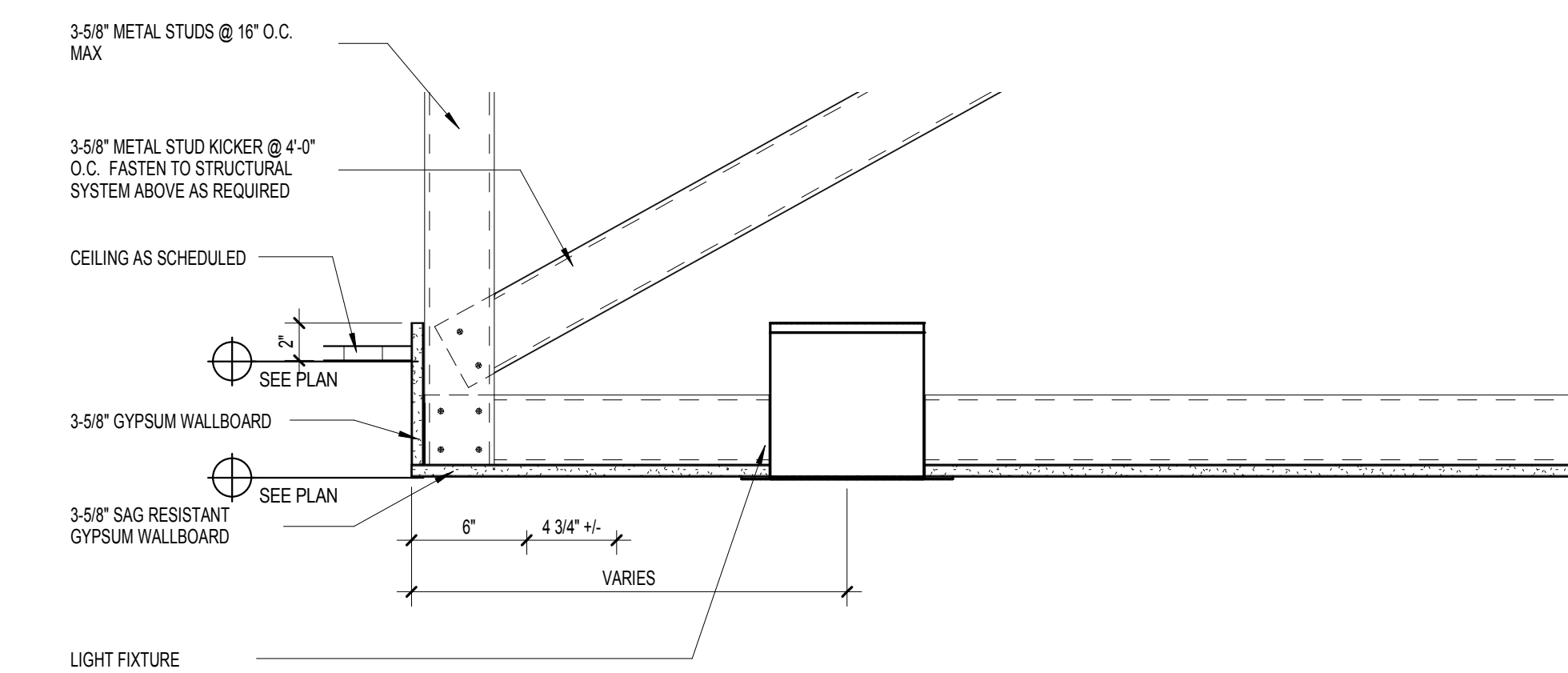
		CONSULTANTS:								PROJECT MANAGER:		Project Number 3627	Scale As indicated	Drawing Title FIRST FLOOR ARCHITECTURAL AND DIMENSION PLAN		Project Title RENOVATE BUILDING 69		VA Project Number 542-CSI-203		Office of Facilities Management	
		Project Manager BRAY MOONEY CONSULTING		Architect ARRAY HEALTHCARE FACILITIES SOLUTIONS		Structural Engineer WZG, STRUCTURAL CONSULTING ENGINEERS		MEP/FP Engineer APOGEE CONSULTING GROUP		Civil Engineer GUIDON DESIGN		Fire Protection Consultant HARRINGTON GROUP		Cost Estimator BRAY MOONEY CONSULTING		Aquatic Consultant ATLANTIC AQUATIC ENGINEERING		Associate Architects W. COOK ARCHITECTS			
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Revisions		Date																			

		Approved: Project Director		Location 1400 Black Horse Hill, Coatesville, PA		Drawing Number AE111			
				Date 03-29-13		Checked TN		Drawn BG	
						Dwg. 16 of 86			



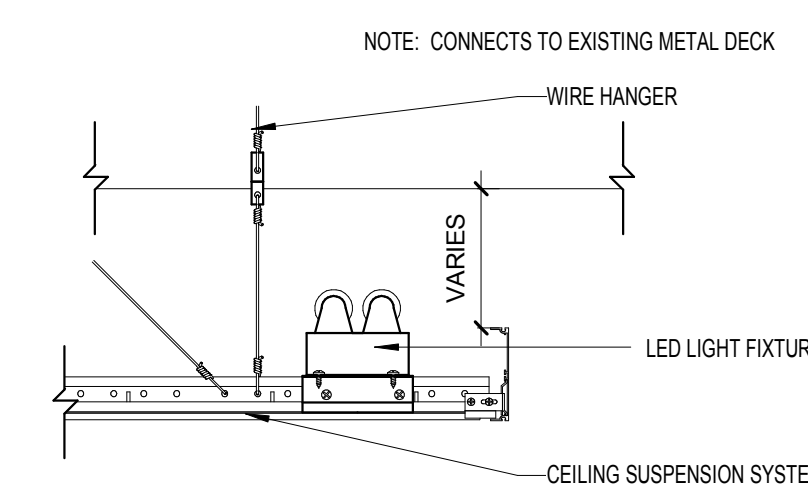


A1 ENLARGED REFLECTED CEILING PLAN - SHARED EQUIPMENT ROOM  
1/4" = 1'-0"

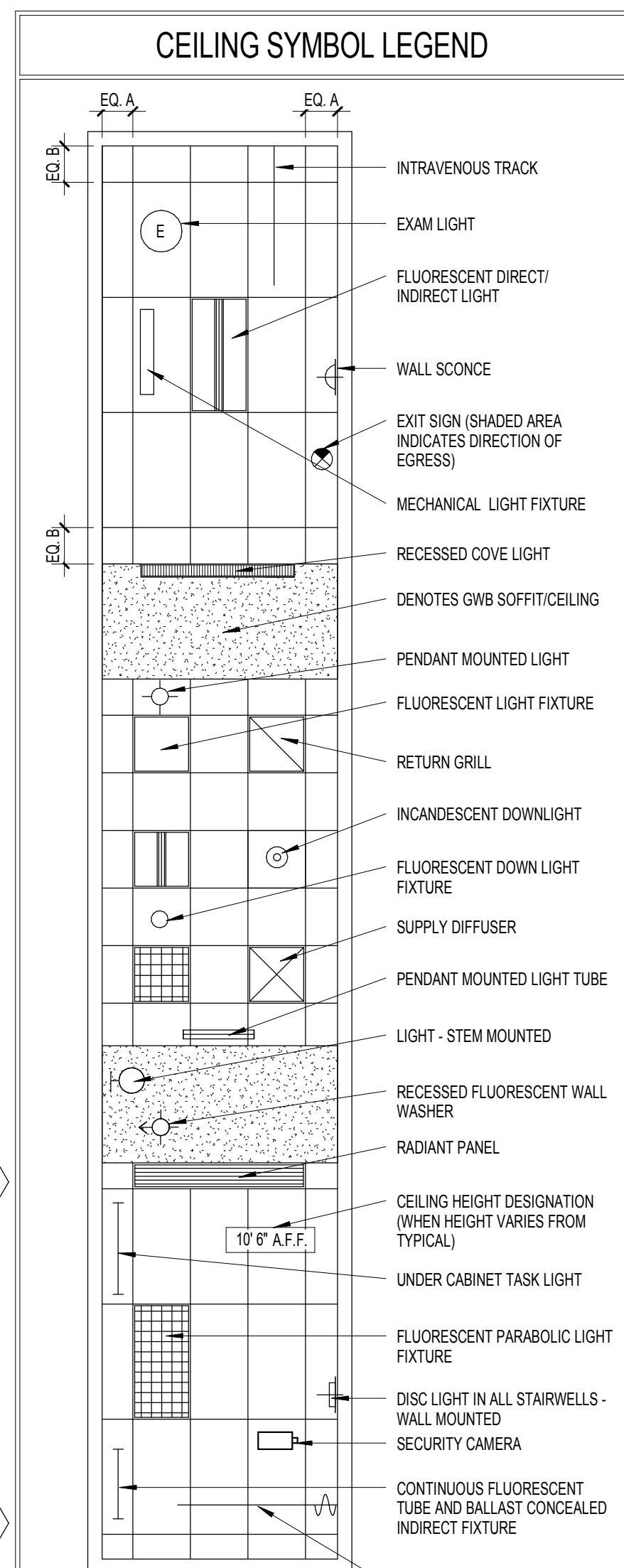


A4 CEILING SECTION  
1 1/2" = 1'-0"

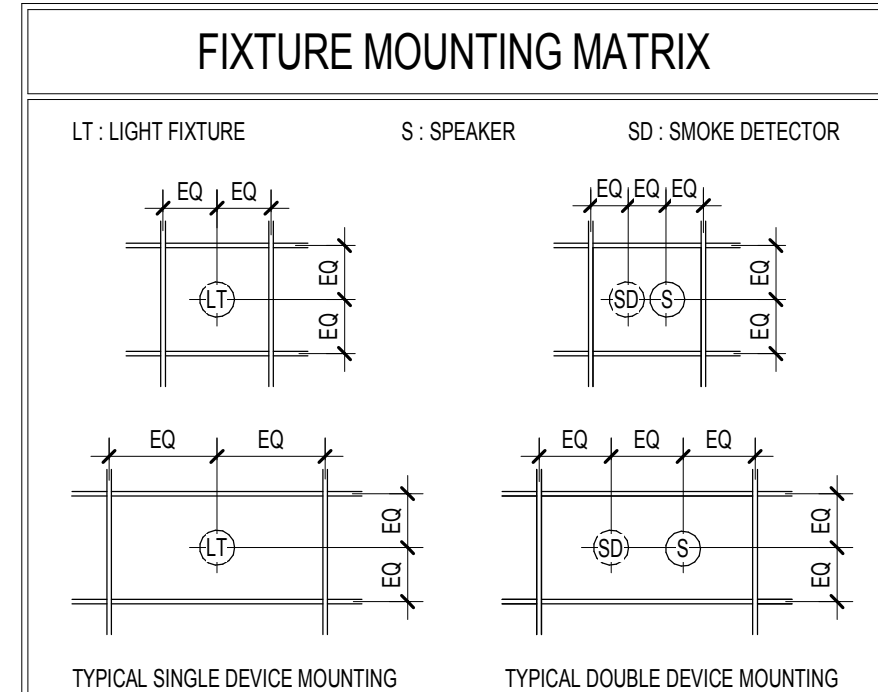
- ### CEILING GENERAL NOTES
1. ALL CEILINGS TO BE 9'-6" MIN. 10'-0" WHERE POSSIBLE. UNLESS NOTED OTHERWISE.
  2. CEILINGS ARE TO BE BUILT AROUND SKYLIGHTS OVER MENTAL HEALTH OCCUPATIONAL THERAPY.
  3. ALL AREAS TO BE 2' X 2' ACT CEILINGS, UNLESS NOTED OTHERWISE.
  4. ALL HVAC DIFFUSERS TO BE CENTERED ON TILES.
  5. ALL SPRINKLER HEADS TO BE CENTERED ON TILES.
  6. ALL GYPSUMBOARD SOFFITS TO BE 7'-10" U.N.O.



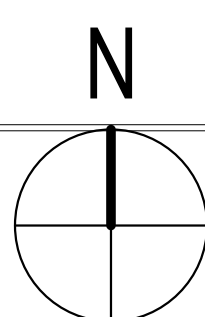
B7 SOFFIT DETAIL @ AXIUM TRIM  
1 1/2" = 1'-0"



CEILING CONTRACTOR TO MEASURE EACH CEILING AREA AND ESTABLISH A CEILING LAYOUT TO BALANCE BORDER WIDTHS AT OPPOSITE EDGES OF EACH ROOM. AVOID USE OF LESS THAN 6" TILES.



- ### REFLECTED CEILING PLAN KEYNOTES
- (C1) CEILING TO BE EXPOSED. REFER TO FINISH PLAN FOR MORE INFORMATION.
  - (C2) CONTRACTOR TO SUPPLY AND INSTALL UNISTRUT SUPPORT SYSTEM, EQUIPMENT RAILS, MOUNTING PLATES, ETC. TO SUPPORT LIFT EQUIPMENT. SEE DETAIL C8/AE12 AND STRUCTURAL DRAWINGS FOR MORE INFORMATION.
  - (C3) ALL CURTAIN TRACKS SHALL BE SUPPORTED INDEPENDENT OF THE CEILING AND SUSPENSION SYSTEM. SEE DETAIL F8 ON SHEET AE12.
  - (C4) INSTALL NEW SKYLIGHTS. SEE DETAILS D1 & D2 ON SHEET AE01.
  - (C5) INSTALL WATER RESISTANT LIGHT FIXTURES IN ROOM.
  - (C6) DECORATIVE WOODLOOK PANEL CEILING SCULPTURE.
  - (C7) LED LIGHT FIXTURE.
  - (C8) COORDINATE HEIGHT OF SOFFIT WITH SIZE AND HEIGHT OF SOUND BOOTH SELECTED BY VA.
  - (C9) CLOSED CIRCUIT TV CAMERA. COORDINATE LOCATION OF CONNECTION WITH VA.
  - (C10) ALTERNATE: PROVIDE EXTERIOR WALL MOUNTED LIGHT FIXTURE IF ALTERNATE #1 IS NOT CONSTRUCTED.
  - (C11) PROVIDE EXTERIOR WALL MOUNTED LIGHT FIXTURE.
  - (C12) EXISTING LIGHT FIXTURE TO REMAIN. PROVIDE NEW BULBS FOR FIXTURE.
  - (C13) PAINT ALL EXPOSED PIPING/DUCTWORK. COORDINATE WITH BKM PROJECT.
  - (C14) PROVIDE STRUCTURAL SUPPORTS/BRACING. COORDINATE WITH STRUCTURAL DRAWINGS.
  - (C15) EXISTING CEILINGS & FIXTURES TO REMAIN.
  - (C16) METAL PANELS (EXTERIOR).



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NOTE: SEE SHEET AE-002 FOR DEDUCT ALTERNATES ISSUED FOR BID

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### PROJECT MANAGER:



Project Number 3627  
Scale As indicated

Drawing Title  
FIRST FLOOR REFLECTED CEILING PLAN

Approved: Project Director

Project Title  
RENOVATE BUILDING 69

Location  
1400 Black Horse Hill, Coatesville, PA

Date 03-29-13  
Checked TN  
Drawn BG

VA Project Number  
542-CSI-203

Building Number  
69

Drawing Number  
AE112

Dwg. 17 of 86

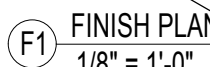
Office of Facilities Management





F1	ALL EXISTING WALL SURFACES TO REMAIN ARE TO BE PREPARED TO RECEIVE NEW WALL FINISH. SEE FINISH PLANS FOR EXTENT, TYPICAL.
F2	4 x 8 FABRIC WRAPPED PANEL. INSTALLATION HEIGHT TBD.
F3	CG-1
F4	HR-1
F5	BG-1
F6	PWP-1 TO BE INSTALLED ON ALL WALLS WITHIN SPACE
F7	CWT-1 TO BE INSTALLED TO 5'-0" A.F.F.
F8	MILLWORK TO BE FL-1 AND SSP-1
F9	INSTALL WF-1 ON EXTERIOR WINDOWS

CODE	MATERIAL
AWP	ARCHITECTURAL WALL PANELS
BG	BUMPER GUARD
CC	CEILING
CC	CURBLE CURTAIN FABRIC
CG	CORNER GUARD
COT	CARPET
CR	CHAIR RAIL
CT	CERAMIC FLOOR TILE
CTB	CERAMIC FLOOR TILE BASE
CWT	CERAMIC WALL TILE
CWB	DECORATIVE GLAZING
CTB	DECORATIVE PLASTIC GLAZING
DWS	DECORATIVE WALL SYSTEM
EP	EPOXY PAINT
EM	ENTRANCE MAT
EX	EXISTING
EXP	EXPOSED STRUCTURE
FWC	FABRIC WALL COVERING
HR	FABRIC WRAPPED PANEL
HP	HAND RAIL
KP	KICK PLATE
PC	POURED POXY FLOORING
PEB	POURED EPOXY INTEGRAL BASE
PL	PLASTIC LAMINATE
PT	PAINT
PWP	PLASTIC WALL PROTECTION
QS	QUARTZ GLAZES
QT	QUARRY TILE
QTB	QUARRY TILE BASE
RB	RUBBER BASE
RD	RUBBER DISC FLOORING
RM	RESILIENT MOLDING
RT	RESILIENT TILE
RS	RUBBER START TREADS
RST	RESINOUS FLOORING
RSB	RESINOUS FLOORING INTEGRAL BASE
SC	STAINCOOL/CRASH
SC	SEALED CONCRETE
SG	SEMI-GLOSS PAINT
SL	SHEET LINOLEUM
SL	SHEET LINOLEUM BASE
SP	SOLID PLASTIC
SPC	SPECIALTY PAINT COATING
SRL	SEAMLESS RUBBER FLOORING
SRT	SOLID RUBBER TILE
SRB	INTERSEAL SEAMLESS RUBBER BASE
SRVT	SLIP RESISTANT VINYL TILE
SSP	SOLID SURFACE POLYMER
STB	STONE FLOORING
STNB	STONE FLOOR BASE
SV	SEAMLESS VINYL FLOORING
SVB	INTERSEAL SEAMLESS VINYL BASE
SWP	SOLID VINYL, WOOD PLANKS
TWP	THICKABLE VINYL PANEL
TZ	TERAZZO FLOORING
V	VINYL COVERING
VNB	VINYL
VNB	VINYL BONDED WOOD FLOORING
VCT	VINYL COMPOSITION TILE
WGB	WOOD BASE
WG	WALL GUARD
WV	WOOD MOLDINGS/STANDING AND RUNNING TRIM
WP	WOOD PANELING
WS	WALL SCOVING
WT	WINDOW TREATMENT



<u>Project Manager</u>	<u>Architect</u>
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<u>Cost Estimator</u>	<u>Age</u>
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Tel (610) 383-4466

UN ROAD 1251 ROMANSVILLE  
E, PA, 18947 COATESVILLE, PA  
G-0409 Tel (610) 383-446

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Scale  
As indicated

Scale  
As indicated

FIRST FLOOR FINISH PLAN

Approved: Project Directo

NOTE: SEE SHEET AE-002 FOR DEDUCT ALTERNATES

Project Title	RENOVATE BUILDING 60
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Location  
1400 Black Horse Hill Coatesville PA

Date

checked

Drawn

542-CSI-202

Building Number  
69

Drawing Number

AE113

Office of  
Facilities  
Management





**FLOOR PATTERN LEGEND**

**TILE AREA SYMBOL**

INDICATES ENTIRE AREA INSIDE THE BOLD LINES TO RECEIVE TILE ACCENT COLOR

**SHEET GOODS AREA SYMBOL**

INDICATES ENTIRE AREA INSIDE THE BOLD LINES TO RECEIVE ACCENT COLOR

**NOTES:**

1. INDICATES FULL TILE
2. SEE FINISH SCHEDULE FOR FINISH CODE, STYLE AND MATERIAL INFORMATION
3. ONLY ACCENT TILE/SHEET GOODS NUMBERS ARE SHOWN ON PLANS. ASSUME STYLE 1 AS MAIN FIELD UNLESS NOTED OTHERWISE

**FLOOR PATTERN GENERAL NOTES**

1. PRIOR TO ORDERING MATERIAL, CONTRACTOR SHALL SUBMIT TO ARCHITECT COORDINATED FLOOR PATTERN PLANS FOR REVIEW AND APPROVAL. THE FLOOR PATTERN PLAN SHALL SHOW COMPLETE LAYOUTS, DIMENSIONS AND STARTING POINTS.
2. ALL FLOOR SUBSTRATES ARE TO BE COMPLETELY FREE OF DIRT AND ADHESIVE RESIDUE PRIOR TO FLOOR INSTALLATION.
3. ALL FLOOR SUBSTRATES ARE TO BE TESTED FOR MOISTURE AND ALKALI PRIOR TO FLOOR INSTALLATION AS PER MANUFACTURER'S RECOMMENDATION. VERIFY WITH MATERIAL INSTALLATION INSTRUCTIONS.
4. ALL CERAMIC TILE FLOORING TO HAVE MARBLE THRESHOLDS AS PER SPECIFICATIONS.
5. ALL FLOORING TO CONTINUE UNDER ALL CASEWORK.
6. SEAMLESS RUBBER FLOORING (SR) TO BE COLD WELDED, UNLESS NOTED OTHERWISE.
7. VCT GRANT TO RUN IN (1) DIRECTION, PERPENDICULAR TO LONG AXIS OF ROOM.
10. ALL VCT GRIDS ARE TO CONTINUOUSLY RUN FROM ONE SPACE TO ANOTHER, UNLESS NOTED OTHERWISE.
11. SHEET VINYL S WITH A PATTERN REPEAT, SHALL BE INSTALLED WITH SEAMS PROPERLY MATCHED. IF SHEET VINYL IS USED WITH PRECISE PATTERN INLAY, UTILIZE METAL TEMPLATE TO CUT SHEET VINYL.

**FLOOR PATTERN KEYNOTES**

- (FP1) PROVIDE LEVEL TRANSITION BETWEEN NEW AND EXISTING FLOORING
- (FP2) INSTALL RUBBER STAIR TREADS (RST-1) ON STAIRS
- (FP3) PROVIDE LEVEL TRANSITION BETWEEN POOL DECK MATERIAL AND RESINOUS FLOORING
- (FP4) PROVIDE LEVEL TRANSITION BETWEEN POOL DEPTH TILES AND RESINOUS FLOORING

**F1 FLOOR PATTERN PLAN**  
1/8" = 1'-0"

**CONSULTANTS:**

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**PROJECT MANAGER:**  
Bray Mooney Consulting

Project Number: 3627  
Scale: As indicated  
Drawing Title: FIRST FLOOR - FLOOR PATTERN PLAN  
Approved: Project Director




Project Title: RENOVATE BUILDING 69  
Location: 1400 Black Horse Hill, Coatesville, PA  
Date: 03-29-13  
Checked: TN  
Drawn: JTM

VA Project Number: 542-CSI-203  
Building Number: 69  
Drawing Number: AE114  
Dwg. 19 of 86

**Office of Facilities Management**  
Department of Veterans Affairs

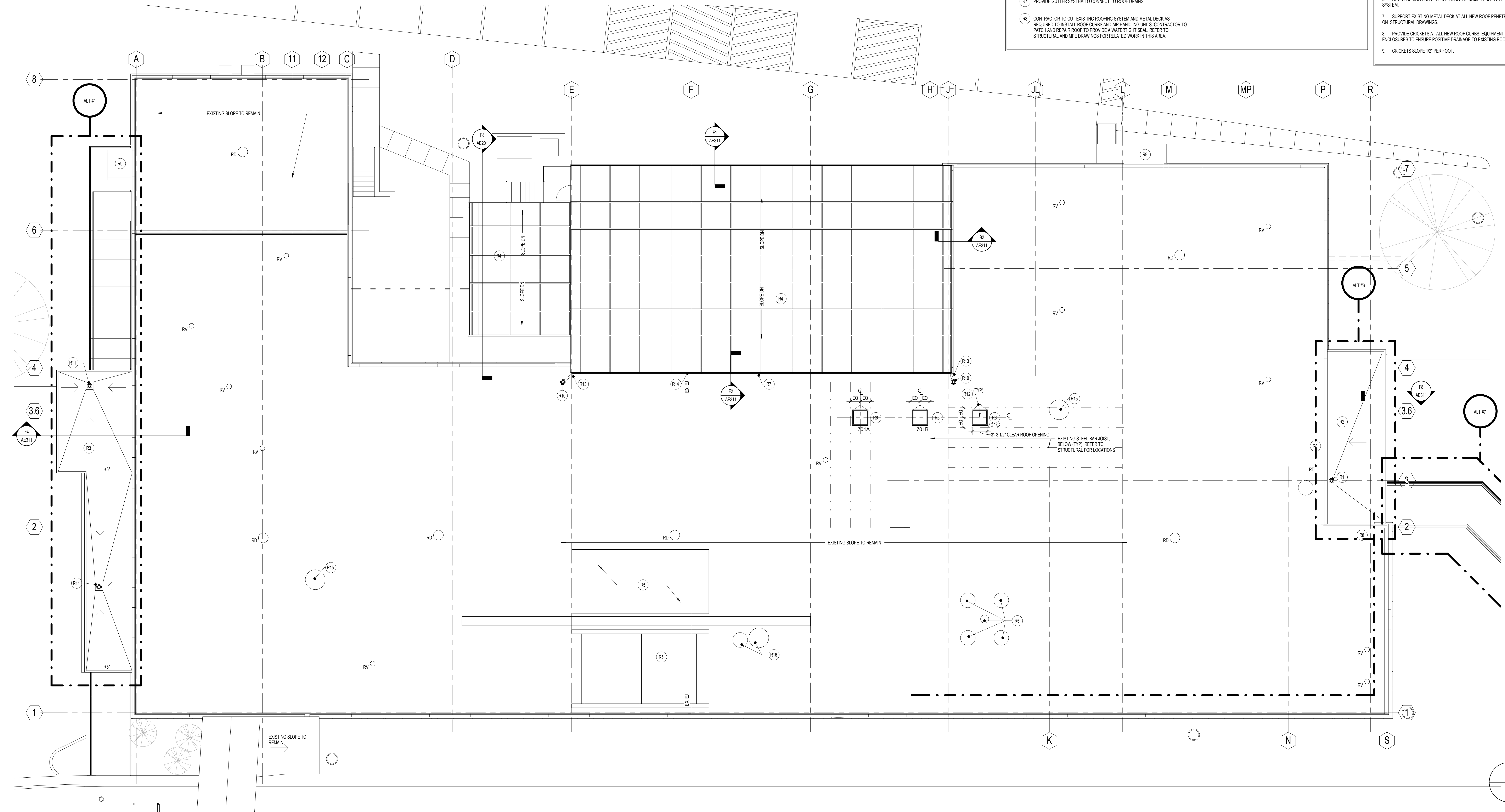
VA FORM DB-6231, OCT 1978



ROOF PLAN SYMBOLS	
	RD = ROOF DRAIN
	RV = ROOF VENT
	RD = NEW ROOF DRAIN

ROOF PLAN KEYNOTES	
(R1) NEW ROOF DRAIN TIES INTO EXISTING INTERIOR DRAIN PIPE.	(R8) EXISTING CANOPY TO REMAIN.
(R2) NEW EPDM ROOFING.	(R10) ROOF DRAINS TO CONNECT TO NEW INTERIOR ROOF DRAIN. REFER TO PLUMBING DRAWINGS.
(R3) NEW METAL PANEL CANOPY WITH EPDM ROOFING.	(R11) ROOF DRAINS TO CONNECT TO DOWNSPOUTS. REFER TO DETAIL F2/AE601. COORDINATE LOCATIONS WITH SKYLIGHT MANUFACTURER.
(R4) PREFABRICATED STRUCTURED POLYCARBONATE PANEL ASSEMBLY.	(R12) PROVIDE CRICKET AT EACH SKYLIGHT. 1/4" PER FOOT SLOPE.
(R5) EXISTING DUNNAGE, TO REMAIN.	(R13) DOWNSPOUT TO CONNECT GUTTER SYSTEM TO ROOF DRAIN.
(R6) NEW 3'-0" X 3'-0" SKYLIGHT. REFER TO SHEET AE601 FOR DETAILS. DIMENSIONS ARE TO LOCATE ROUGH OPENING (INSIDE CURB). COORDINATE ROUGH OPENING DIMENSIONS WITH SKYLIGHT MANUFACTURER. SLOPE CURB 1/4" PER FOOT TO PROVIDE POSITIVE DRAINAGE.	(R14) PROVIDE EXPANSION JOINT AND COVER AT CURB/WALL.
(R7) PROVIDE GUTTER SYSTEM TO CONNECT TO ROOF DRAINS.	(R15) NEW EXHAUST FAN ON EXISTING ROOF CURB. REFER TO MECHANICAL DRAWINGS FOR RELATED WORK IN THIS AREA.
(R8) CONTRACTOR TO CUT EXISTING ROOFING SYSTEM AND METAL DECK AS REQUIRED TO INSTALL ROOF CURBS AND AIR HANDLING UNITS. CONTRACTOR TO PATCH AND REPAIR ROOF TO PROVIDE A WATERTIGHT SEAL. REFER TO STRUCTURAL AND MPE DRAWINGS FOR RELATED WORK IN THIS AREA.	(R16) REMOVE EXISTING ROOFTOP EQUIPMENT AND CURB. PATCH AND REPAIR ROOF TO PROVIDE A WATERTIGHT SEAL. REFER TO MECHANICAL DRAWINGS FOR RELATED WORK IN THIS AREA.

ROOF PLAN GENERAL NOTES	
1. ALL DEMOLITION AND PATCHING WORK TO BE PERFORMED IN ACCORDANCE WITH SPECIFICATION SECTION 01 73 20, CUTTING AND PATCHING AND SECTION 02 41 00, DEMOLITION.	2. NOTIFY ARCHITECT OF DISCREPANCIES BETWEEN EXISTING CONDITIONS AND DRAWINGS BEFORE PROCEEDING WITH SELECTIVE DEMOLITION.
3. REMOVE NO MORE EXISTING ROOFING THAN WHAT CAN BE COVERED IN ONE DAY BY NEW ROOFINGS AND SO THAT BUILDING INTERIOR REMAINS WATERTIGHT AND WEATHERTIGHT.	4. REMOVE, REPLACE, PATCH AND REPAIR MATERIALS AND SURFACES CUT OR DAMAGED DURING DEMOLITION AND INSTALLATION, BY METHODS AND WITH MATERIALS SO AS NOT TO VOID EXISTING ROOF WARRANTIES. NOTIFY ROOF WARRANTOR BEFORE PROCEEDING.
5. NOTIFY ROOF WARRANTOR ON COMPLETION OF SELECTIVE DEMOLITION, AND OBTAIN DOCUMENTATION VERIFYING THAT EXISTING ROOF SYSTEM HAS BEEN INSPECTED AND WARRANTY REMAINS IN EFFECT. SUBMIT DOCUMENTATION AT PROJECT CLOSEOUT.	6. NEW FLASHING AND SEALANT SHALL BE COMPATIBLE WITH EXISTING ROOFING SYSTEM.
7. SUPPORT EXISTING METAL DECK AT ALL NEW ROOF PENETRATIONS AS SHOWN ON STRUCTURAL DRAWINGS.	8. PROVIDE CRICKETS AT ALL NEW ROOF CURBS. EQUIPMENT SUPPORTS AND ENCLOSURES TO ENSURE POSITIVE DRAINAGE TO EXISTING ROOF DRAINS.
9. CRICKETS SLOPE 1/2" PER FOOT.	

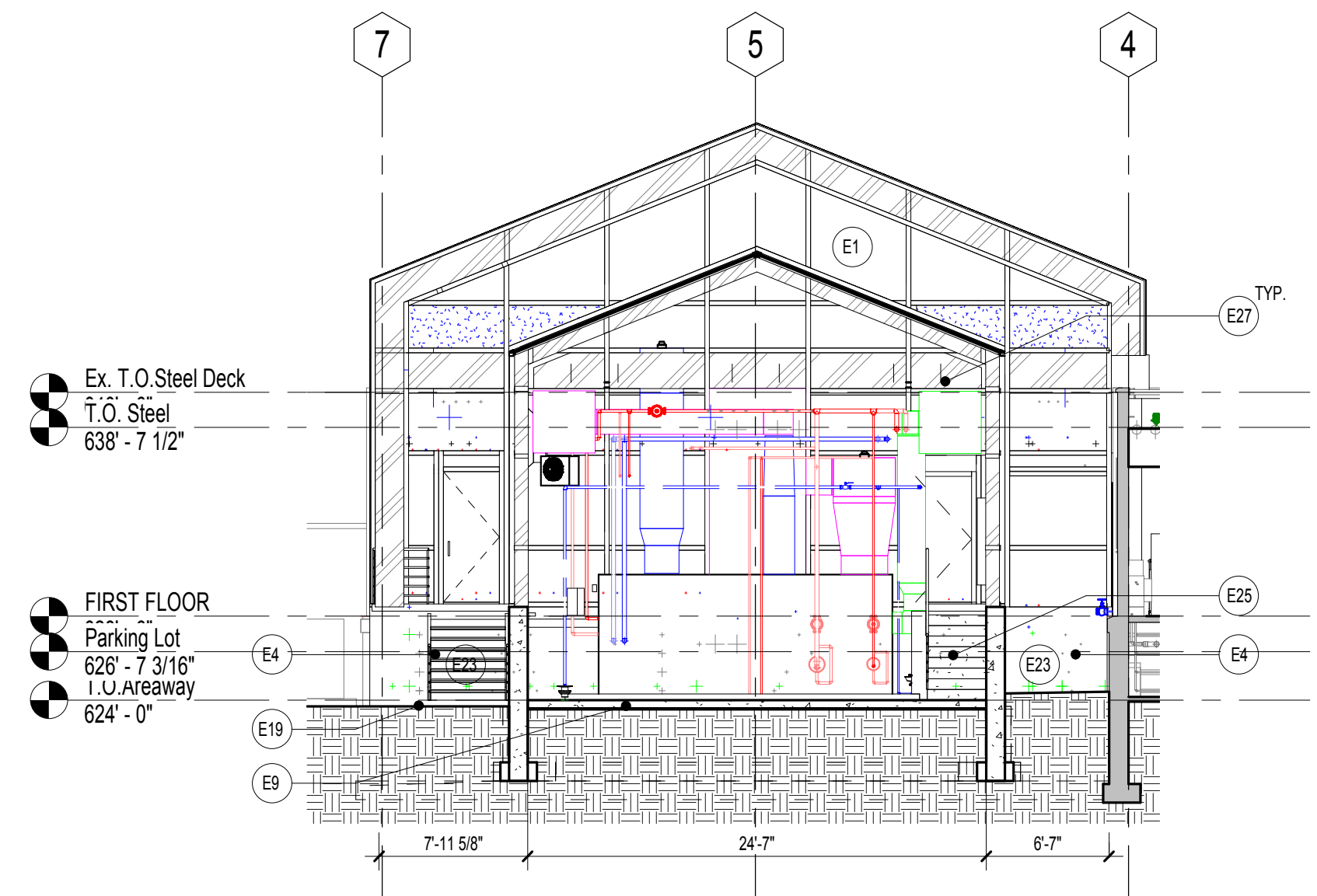
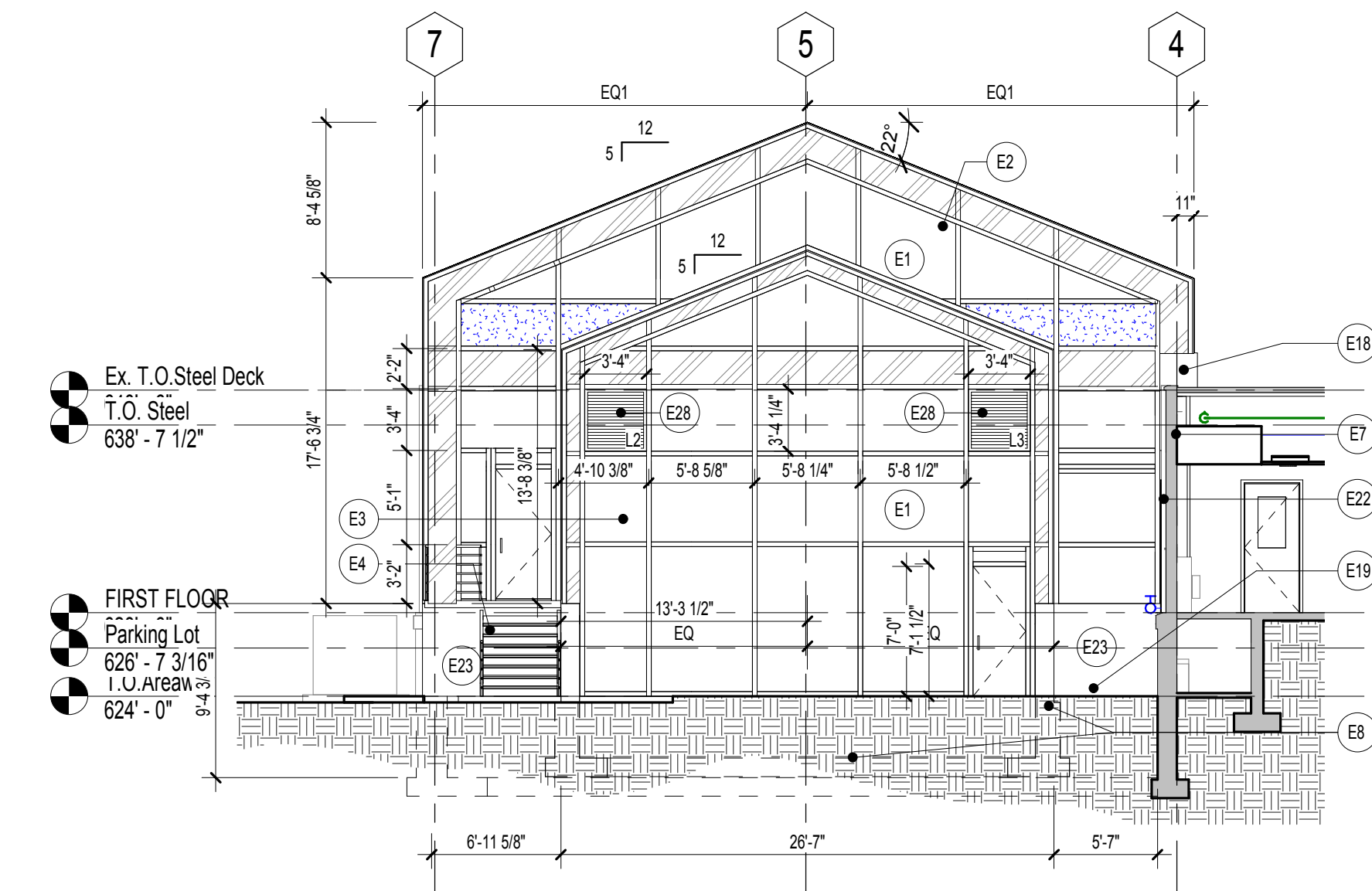
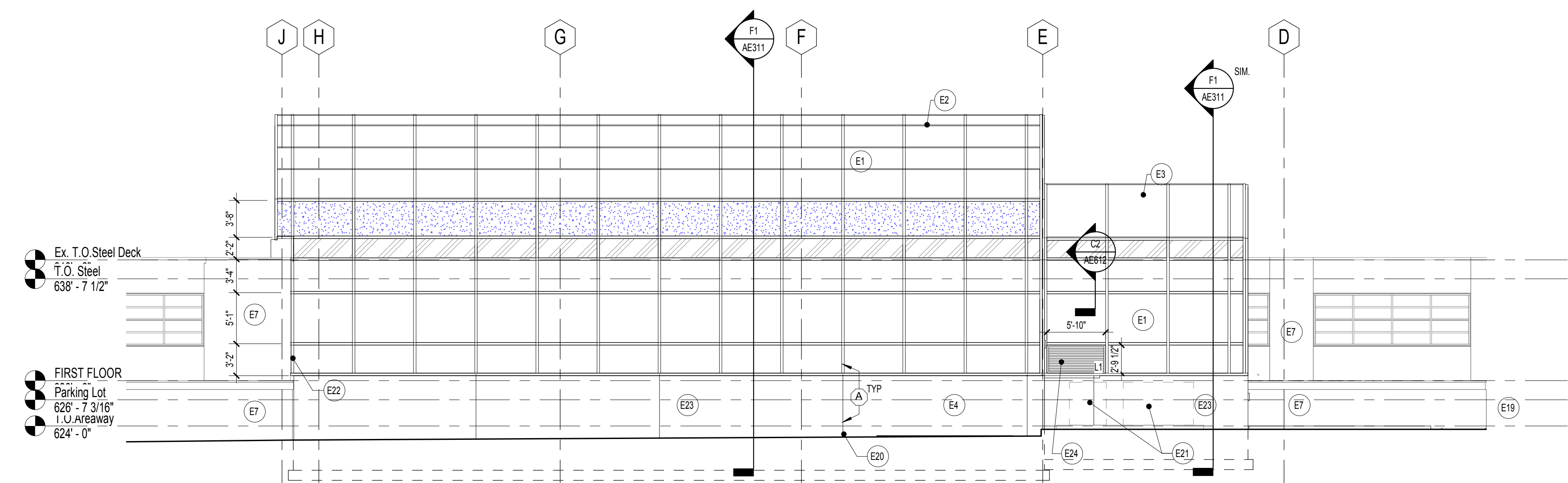
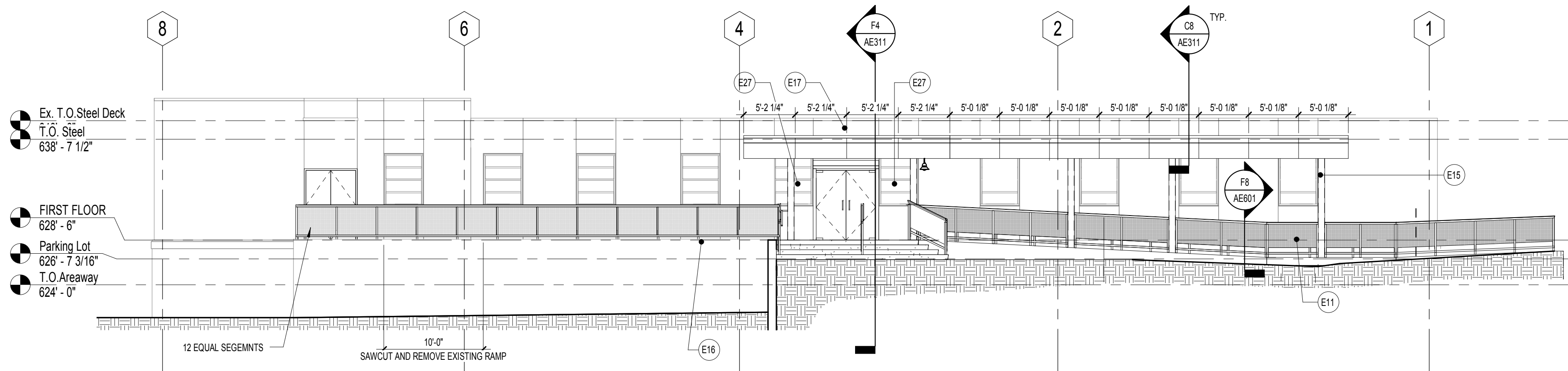
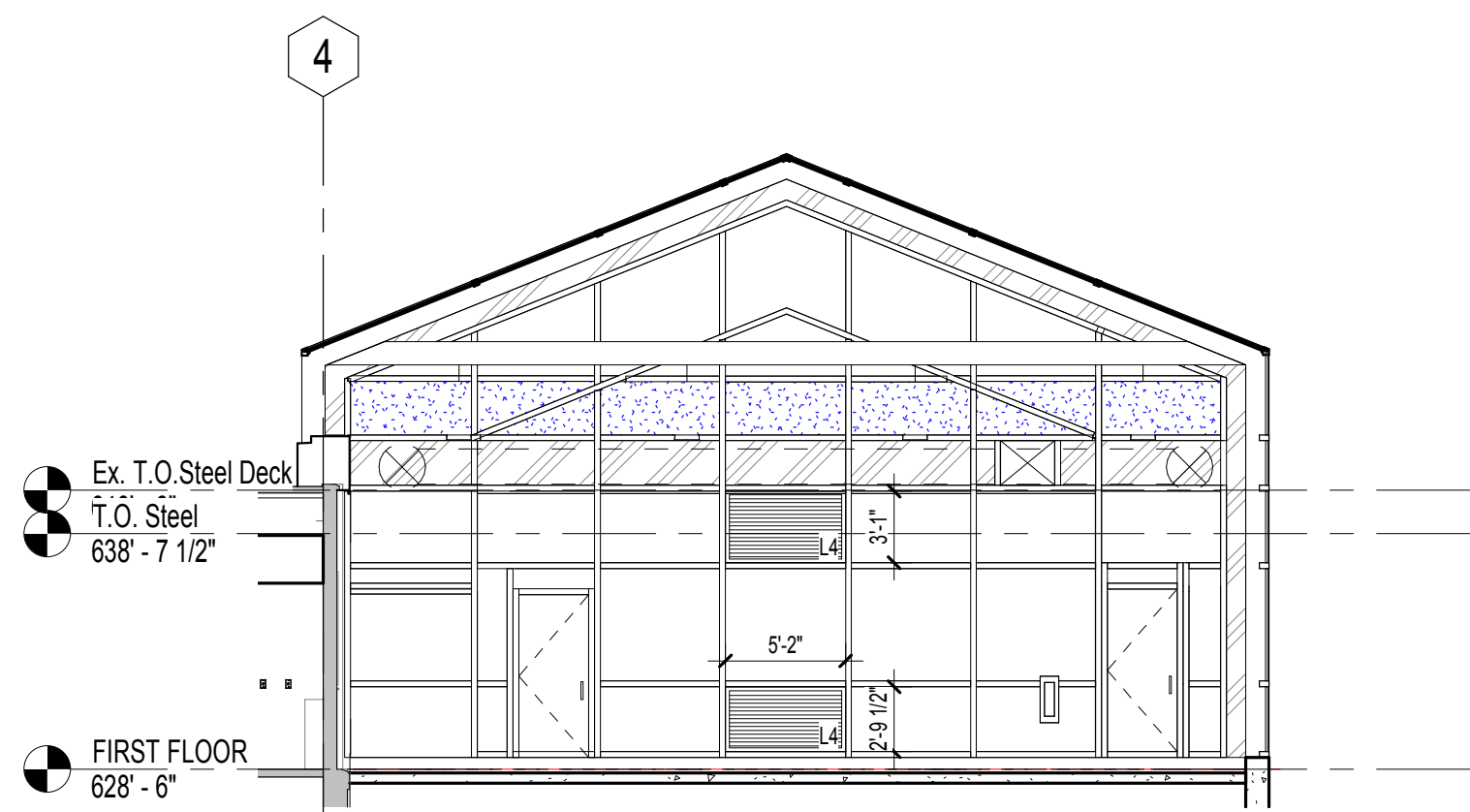
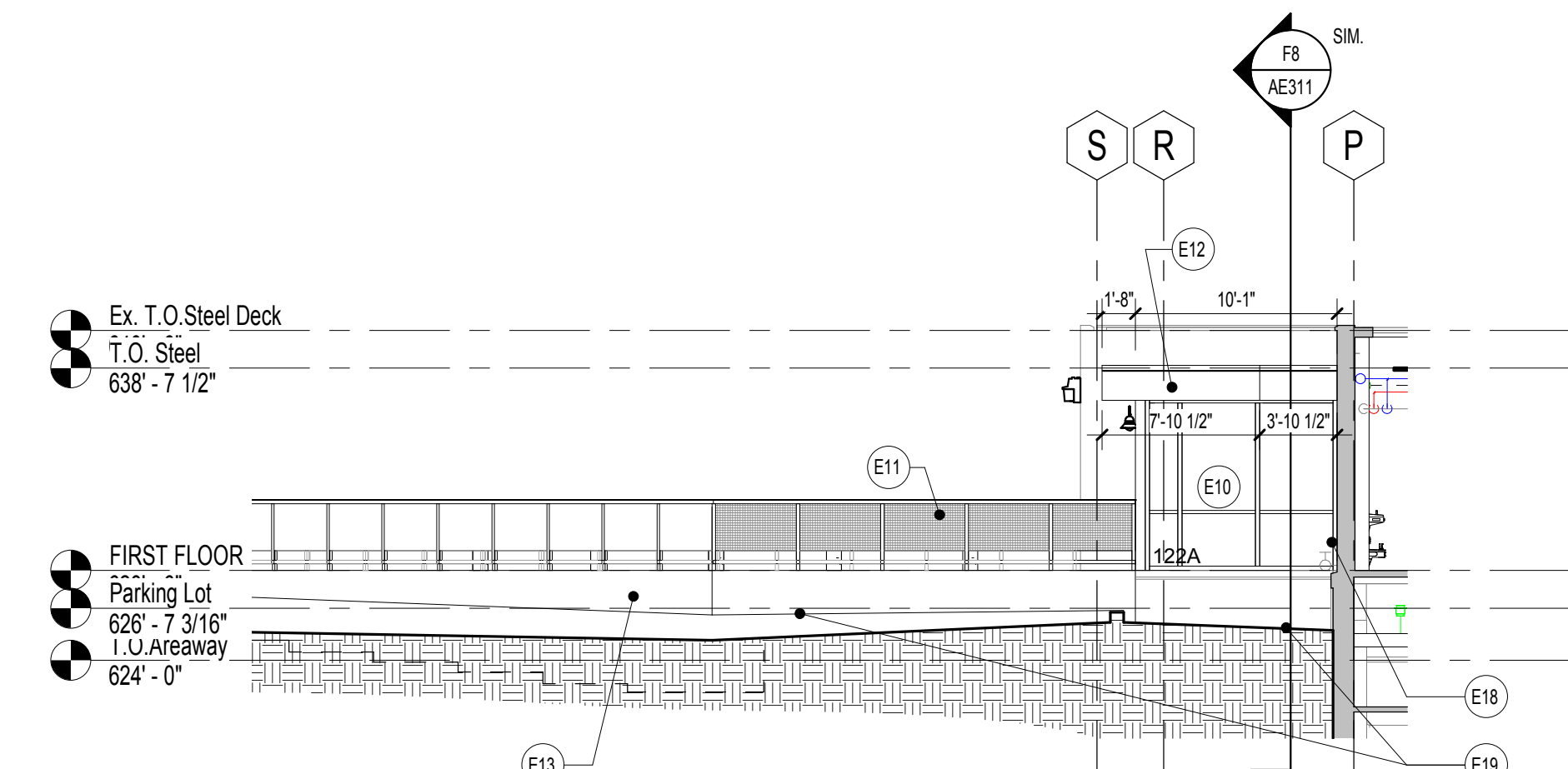
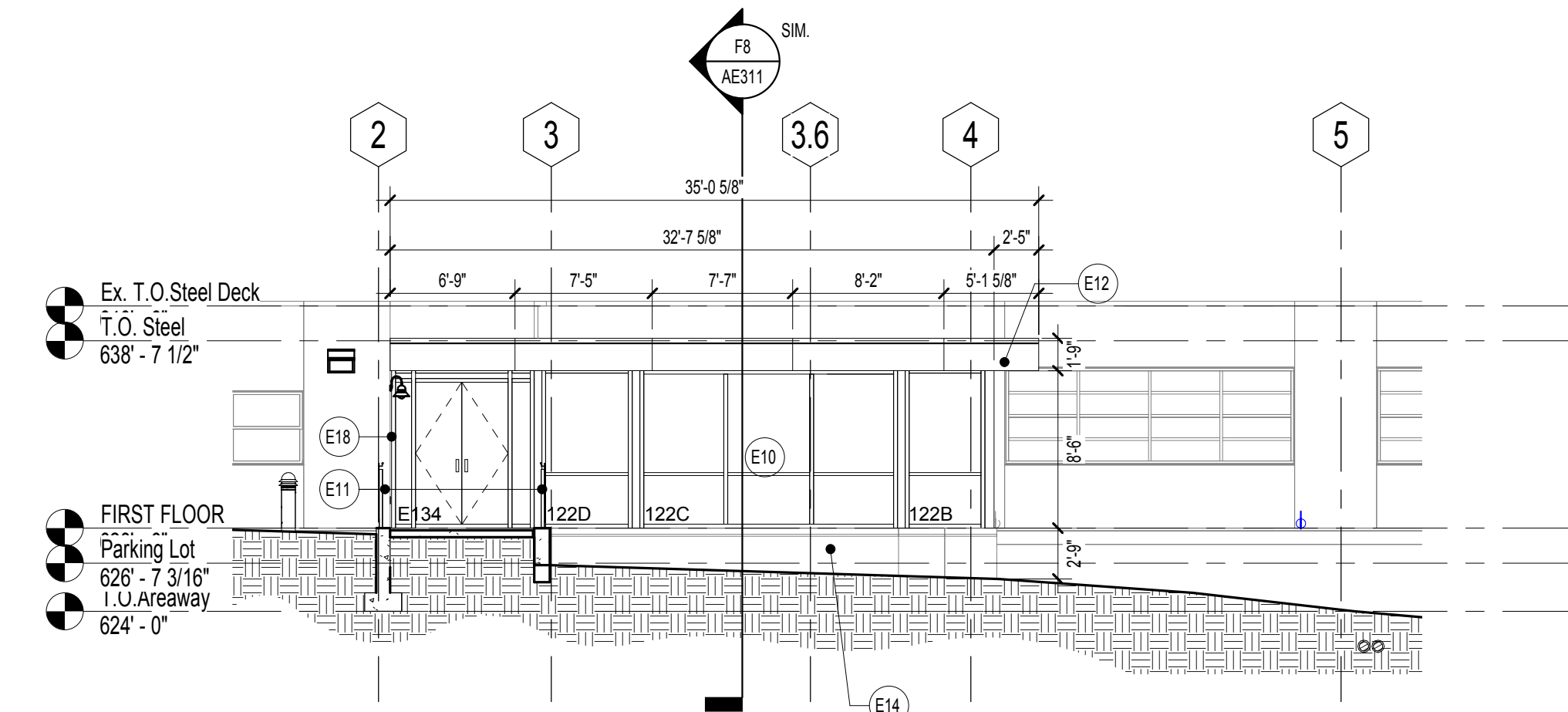
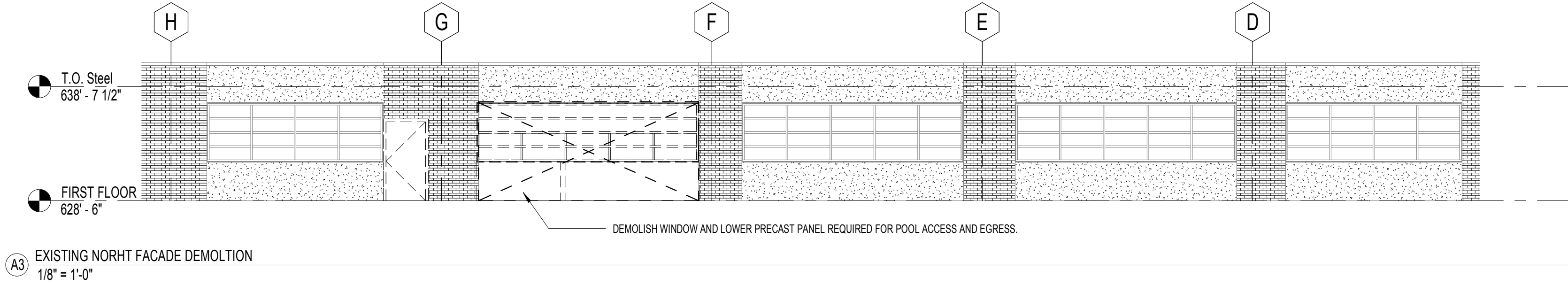
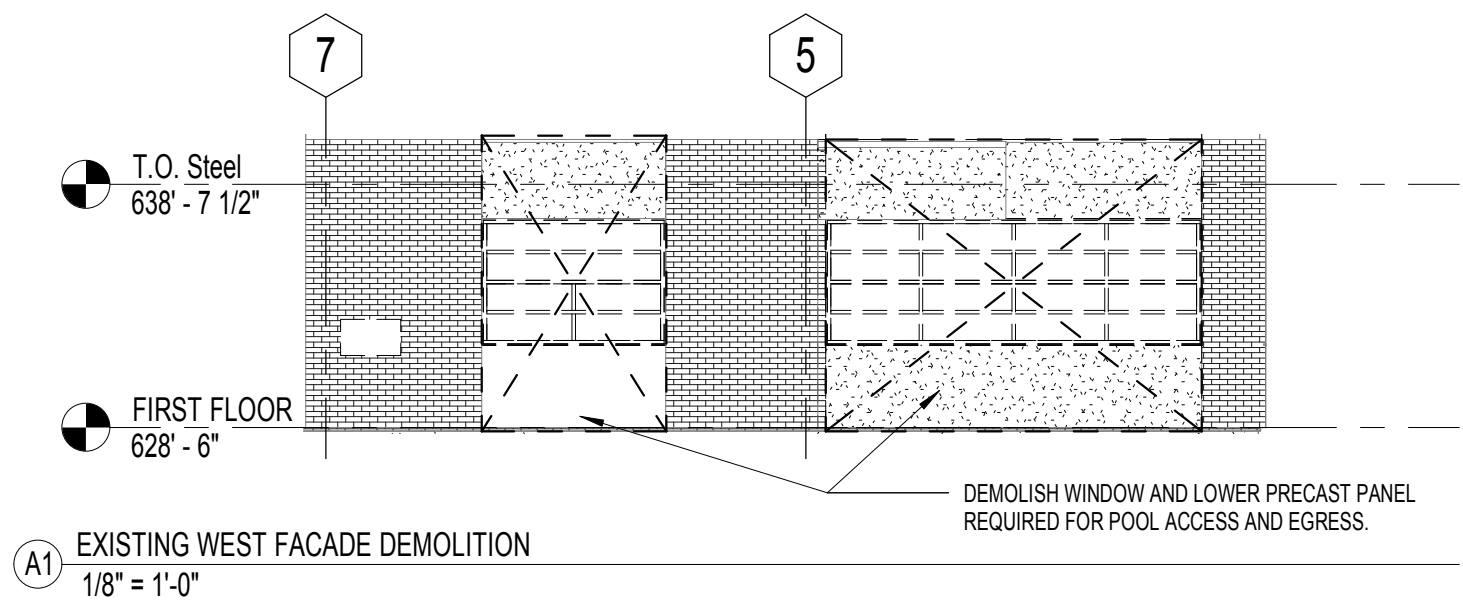


(F1) ROOF PLAN  
1/8" = 1'-0"

FULLY SPRINKLERED  
NOTE: SEE SHEET AE-002 FOR DEDUCT ALTERNATES ISSUED FOR BID

		CONSULTANTS:								PROJECT MANAGER:		Project Number 3627	Scale As indicated	Drawing Title  ROOF PLAN		Project Title  RENOVATE BUILDING 69		VA Project Number 542-CSI-203		Office of Facilities Management  			
		Project Manager BRAY MOONEY CONSULTING		Architect ARRAY HEALTHCARE FACILITIES SOLUTIONS		Structural Engineer WZG, STRUCTURAL CONSULTING ENGINEERS		MEP/FP Engineer APOGEE CONSULTING GROUP		Civil Engineer GUIDON DESIGN		Fire Protection Consultant HARRINGTON GROUP		Cost Estimator BRAY MOONEY CONSULTING		Aquatic Consultant ATLANTIC AQUATIC ENGINEERING		Associate Architects W. COOK ARCHITECTS					
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Revisions		Date												Approved: Project Director		Location 1400 Black Horse Hill, Coatesville, PA		Drawing Number  AE121					
																Date 03-29-13		Checked TN		Drawn BG		Dwg. 20 of 68	





EXTERIOR ELEVATION KEYNOTES	
E1	1" POLYCARBONATE GLAZING.
E2	PREFABRICATED POOL ENCLOSURE. MANUFACTURER FOR BASIS OF DESIGN - PER.
E3	PREFABRICATED ENCLOSURE TO HOUSE AHU. MANUFACTURER FOR BASIS OF DESIGN - PER. ENCLOSURE TO MATCH PREFABRICATED POOL ENCLOSURE.
E4	CAST-IN-PLACE CONCRETE RETAINING WALL WITH CAP. REFER TO STRUCTURAL DRAWINGS FOR MORE DETAILS.
E5	5" CONCRETE SLAB ON DECK WITH RADIANT HEATING.
E6	CAST-IN-PLACE CONCRETE POOL.
E7	EXISTING EXTERIOR WALL, TO REMAIN.
E8	NEW RETAINING WALL FOUNDATION. REFER TO STRUCTURAL.
E9	8" REINFORCED SLAB ON GRADE. REFER TO ARCHITECTURAL PLAN FOR DIMENSIONS AND STRUCTURAL DRAWINGS FOR DETAILS.
E10	STOREFRONT
E11	OLD MESH RAILING WITH METAL HANDRAIL OR APPROVED EQUAL. REFER TO SHEET AE901 FOR DETAILS. WEST ENTRANCE RAILING TO BE CONTINUOUS, WITH POSTS SPACED EQUALLY IF ALTERNATE #1 IS NOT ACCEPTED.
E12	INSULATED METAL ROOF PANEL. SIZE, TEXTURE AND COLOR TO BE SELECTED BY ARCHITECT.
E13	CAST-IN-PLACE CONCRETE RETAINING WALL. SEE CIVIL DRAWING FOR TYPE.
E14	EXISTING CONCRETE LOADING DOCK. POWER WASHED AND WATERPROOFED.
E16	NEW STRUCTURAL STEEL FRAME. REFER TO STRUCTURAL.
E18	RESLOPED RAMP.
E17	EXISTING BRICK TO REMAIN.
E18	FURNISH AND INSTALL EXTERIOR WALL EXPANSION JOINT. REFER TO SPECIFICATIONS SECTION 07500 FOR TYPE.
E19	GRADE TO BE BACKFILLED AND SLOPED PER CIVIL DRAWINGS.
E20	1" CONCRETE CONTROL JOINT.
E21	EXISTING TRANSFORMER, TO REMAIN.
E22	INSTALL EMSEAL. VERIFY THICKNESS IN FIELD.
E23	ALTERNATE NO.3. PROVIDE BRICK SHELVE IN RETAINING WALL AND IN BRICK ON SHELVE PROVIDED
E24	ALTERNATE NO.5. PROVIDE LOWER SIZE OF FULL PANEL. BLANK OFF ON INTERIOR AREA NOT USED BY POOL EXHAUST SYSTEM.
E25	CONCRETE STAIR AND LANDING. REFER TO STRUCTURAL DRAWINGS FOR MORE INFORMATION.
E26	PENDANT LIGHT FIXTURE SUSPENDED FROM POOL ENCLOSURE STRUCTURE. REFER TO ELECTRICAL DRAWINGS FOR FIXTURE TYPE.
E27	REPLACE GLAZING IN EXISTING WINDOW WITH INSULATED, TEMPERED GLAZING. COLOR AND TINT TO MATCH EXISTING.
E28	LOUVER PAINTED WHITE.

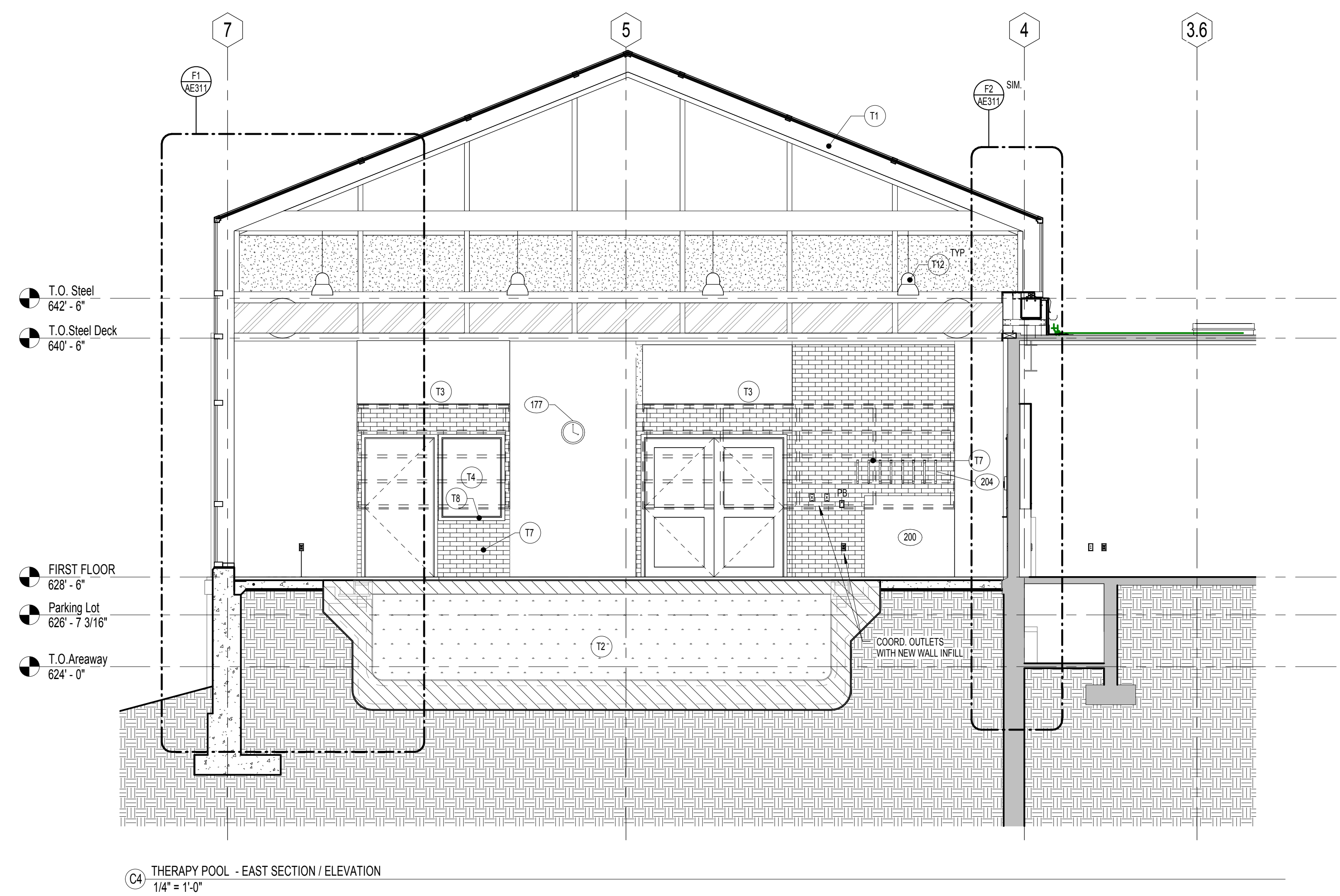
ELEVATION MATERIAL LEGEND	
	1" METAL PANEL, PER MANUFACTURER
	1" POLYCARBONATE, TRANSLUCENT, PER MANUFACTURER
	1" INSULATED GLASS
	0.125" COMPOSITE ALUMINUM PANEL

FULLY SPRINKLERED  
NOTE: SEE SHEET AE-002 FOR DEDUCT ALTERNATES ISSUED FOR BID

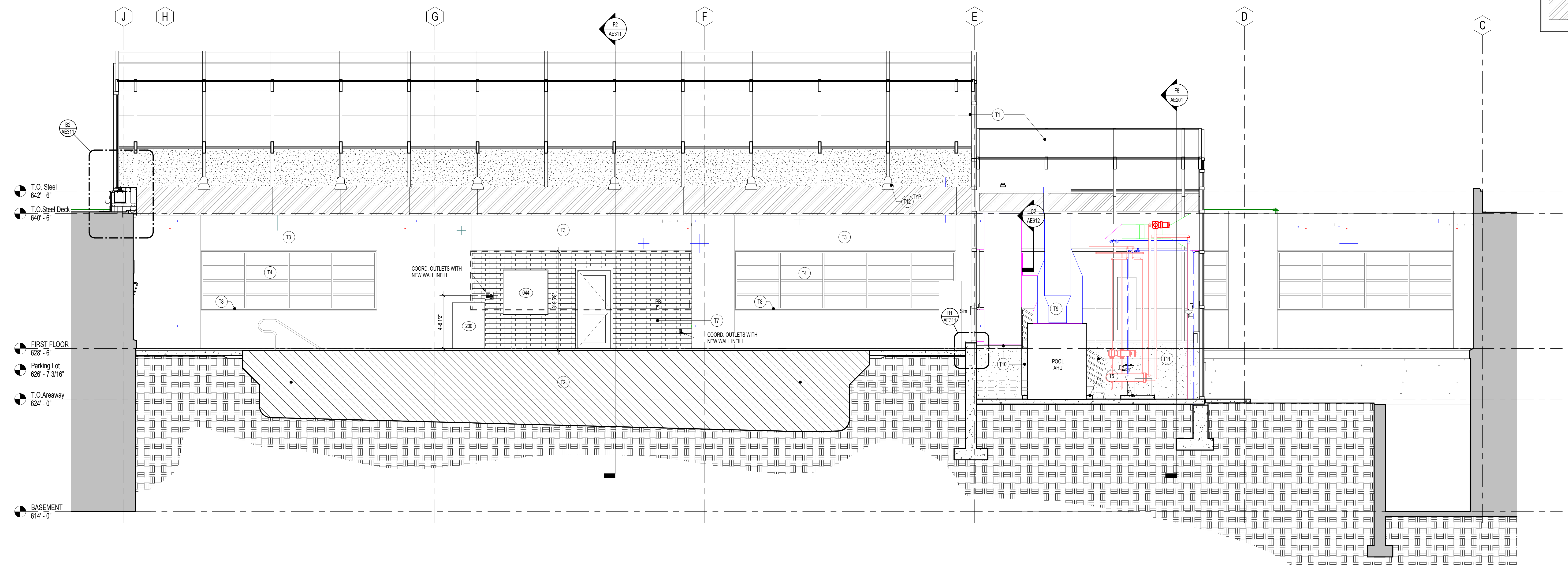
CONSULTANTS:										PROJECT MANAGER:		Project Number 3627	Scale As indicated	Drawing Title BUILDING SECTIONS AND ELEVATIONS		Project Title RENOVATE BUILDING 69		VA Project Number 542-CSI-203		Office of Facilities Management	
Project Manager BRAY MOONEY CONSULTING		Architect ARRAY HEALTHCARE FACILITIES SOLUTIONS	Structural Engineer WZG, STRUCTURAL CONSULTING ENGINEERS	MEP/FP Engineer APOGEE CONSULTING GROUP	Civil Engineer GUIDON DESIGN	Fire Protection Consultant HARRINGTON GROUP	Cost Estimator BRAY MOONEY CONSULTING	Aquatic Consultant ATLANTIC AQUATIC ENGINEERING	Associate Architects W. COOK ARCHITECTS	<div>Bray Mooney Consulting</div>		Approved: Project Director		Location 1400 Black Horse Hill, Coatesville, PA		Drawing Number AE201					
410 E. 21 STREET CHESTER, PA. 19013 Tel: (610) 872-3716		2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA. 19406 Tel: (610) 279-5599		P.O. BOX 24 40 LITTLE ROAD ZIEGLERVILLE, PA. 19482 Tel: (610) 287-3194		7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC. 27606 Tel: (919) 858-7420		2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 600-6388				7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC. 28227 Tel: (704) 531-9077		410 E. 21 STREET CHESTER, PA. 19013 Tel: (610) 872-3716		1823 DEEP RUN ROAD PIPERSVILLE, PA. 18947 Tel: (215) 786-0409		1251 ROMANSVILLE ROAD COATESVILLE, PA. 19320 Tel: (610) 383-4460			
Revisions		Date		Date		Date		Date				Date		Date		Date		Date			
																03-29-13		TN		BG	
																		Dwg. 21 of 86			



three inches = one foot  
one and one half inches = one foot  
one inch = one foot  
three quarters inch = one foot  
one half inch = one foot  
three eighths inch = one foot  
one quarter inch = one foot  
one eighth inch = one foot  
one eighth inch = one foot



C4 THERAPY POOL - EAST SECTION / ELEVATION  
1/4" = 1'-0"



F1 THERAPY POOL - SOUTH  
1/4" = 1'-0"

ARCHITECTURAL GENERAL NOTES

1. SEE SHEET AE704 FOR EQUIPMENT SCHEDULE.

2. SEE SHEET AE701 FOR DOOR SCHEDULE.

3. SEE SHEET AE701 FOR WINDOW SCHEDULE.

4. SEE SHEET AE702 FOR TOILET ACCESSORY SCHEDULE.

5. SEE SHEET AE704 FOR FINISH SCHEDULE.

THERAPY POOL ELEVATION KEYNOTES

T1 POOL ENCLOSURE, BY OTHERS. REFER TO VENDOR DRAWINGS FOR MORE INFORMATION.

T2 POOL, BY OTHERS. REFER TO VENDOR DRAWINGS FOR MORE INFORMATION.

T3 EXISTING PRECAST CONCRETE PANEL TO REMAIN.

T4 EXISTING WINDOW, TO REMAIN. PROVIDE POLYCARBONATE PANELS TO MATCH POOL ENCLOSURE. TO BE REVIEWED BY ARCHITECT.

T5 4" HOUSEKEEPING PAD. REFER TO MECHANICAL DRAWINGS FOR SIZE AND LOCATION.

T6 NOT USED.

T7 NEW BRICK WALL TO MATCH EXISTING.

T8 WINDOW SILL TO BE CLEANED AND RETURNED TO ORIGINAL FINISH.

T9 AIR HANDLING UNIT. COORDINATE WITH MECHANICAL DRAWINGS.

T10 CONCRETE STAIR AND LANDING. REFER TO STRUCTURAL DRAWINGS FOR MORE INFORMATION.

T11 PIPE RAILING TO MATCH POOL RAILING.

T12 PENDANT LIGHT FIXTURE SUSPENDED FROM POOL ENCLOSURE STRUCTURE. REFER TO ELECTRICAL DRAWINGS FOR FIXTURE TYPE.

ELEVATION MATERIAL LEGEND

1" METAL PANEL, PER MANUFACTURER

1" POLYCARBONATE, TRANSLUCENT, PER MANUFACTURER

1" INSULATED GLASS

0.125" COMPOSITE ALUMINUM PANEL

FULLY SPRINKLERED  
NOTE: SEE SHEET AE-002 FOR DEDUCT ALTERNATES ISSUED FOR BID

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Tel: (610) 383-4460

PROJECT MANAGER:

Project Number  
3627

Scale  
As indicated

Bray Mooney Consulting

Drawing Title  
ENLARGED ELEVATIONS - THERAPY POOL

Approved: Project Director

Project Title  
RENOVATE BUILDING 69

Location  
1400 Black Horse Hill, Coatesville, PA

Date  
03-29-13

Checked  
TN

Drawn  
BG

VA Project Number  
542-CSI-203

Building Number  
69

Drawing Number  
AE301

Dwg. 23 of 86

Office of Facilities Management

Department of Veterans Affairs

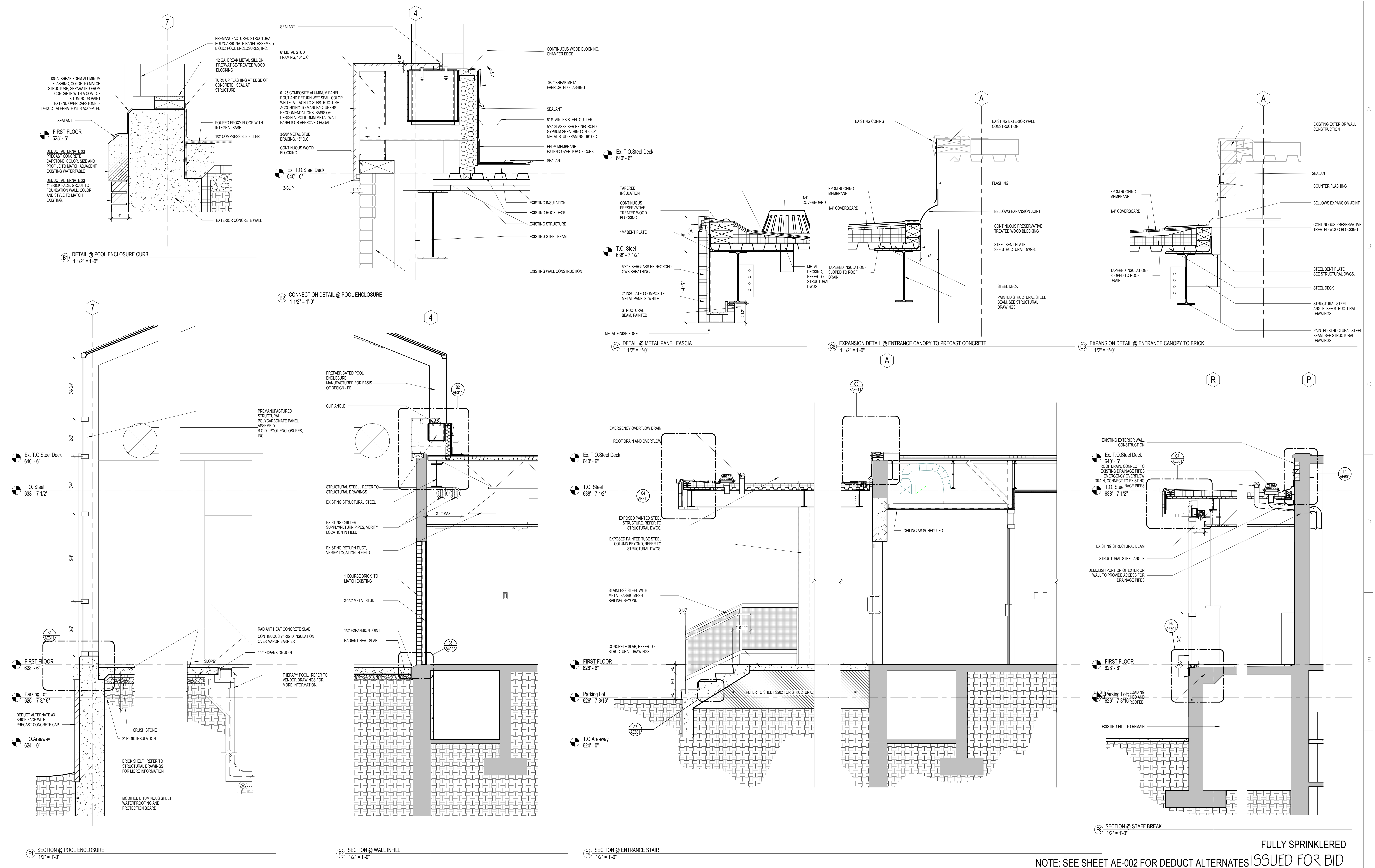
Revisions

Date

VA FORM DB-6231, OCT 1978



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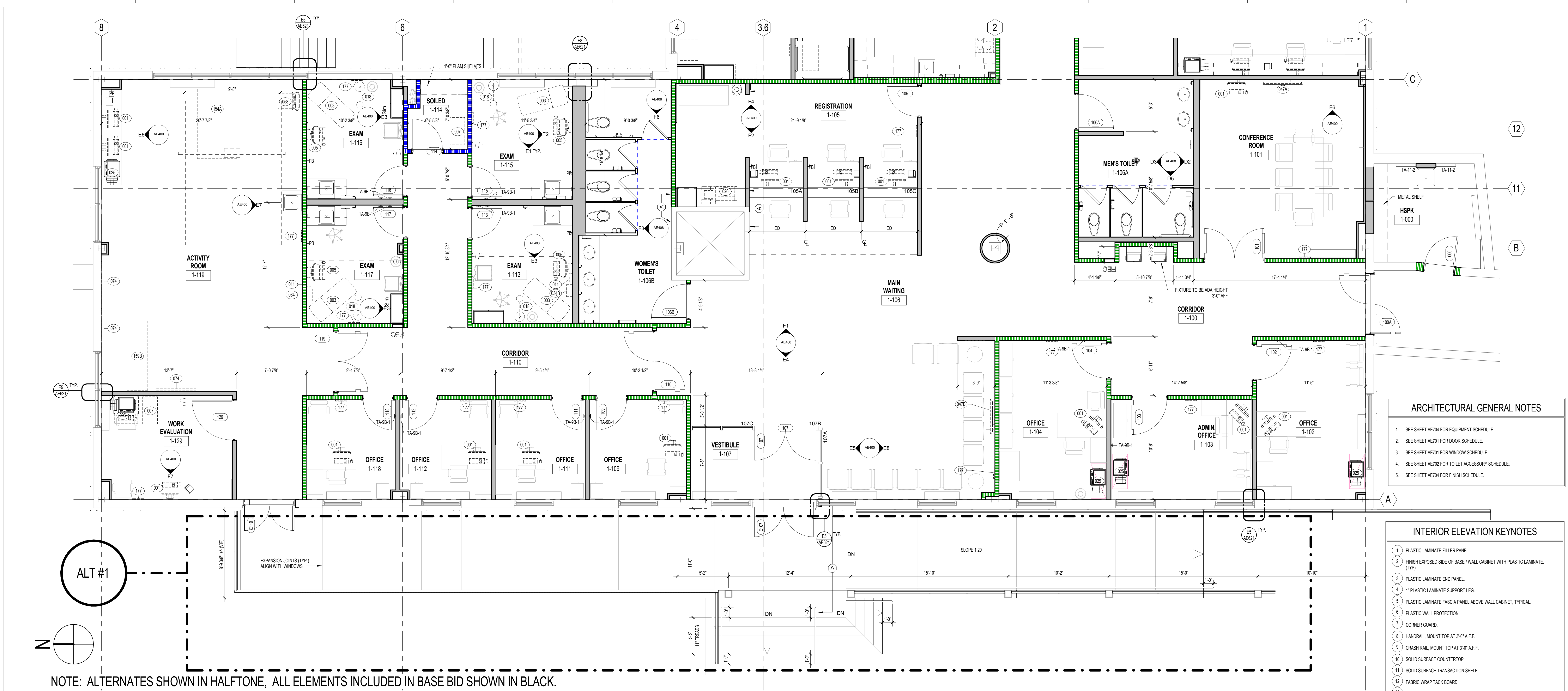


NOTE: SEE SHEET AE-002 FOR DEDUCT ALTERNATES ISSUED FOR BID

		<b>CONSULTANTS:</b>								<b>PROJECT MANAGER:</b>		Project Number 3627	Scale As indicated	Drawing Title  WALL SECTIONS		Project Title  RENOVATE BUILDING 69		VA Project Number 542-CSI-203		Office of Facilities Management	
		<u>Project Manager</u> BRAY MOONEY CONSULTING		<u>Architect</u> ARRAY HEALTHCARE FACILITIES SOLUTIONS		<u>Structural Engineer</u> WZG, STRUCTURAL CONSULTING ENGINEERS		<u>MEP/FP Engineer</u> APOGEE CONSULTING GROUP		<u>Civil Engineer</u> GUIDON DESIGN		<u>Fire Protection Consultant</u> HARRINGTON GROUP		<u>Cost Estimator</u> BRAY MOONEY CONSULTING		<u>Aquatic Consultant</u> ATLANTIC AQUATIC ENGINEERING		<u>Associate Architects</u> W. COOK ARCHITECTS			
		410 E. 21 STREET CHESTER, PA. 19013 Tel: (610) 872-3716		2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA. 19406 Tel: (610) 279-5599		P.O. BOX 24 40 LITTLE ROAD ZIEGLERVILLE, PA. 19422 Tel: (610) 287-3194		7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC. 27606 Tel: (919) 858-7420		2453 N. DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 600-6388		7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC. 28227 Tel: (704) 531-9077		410 E. 21 STREET CHESTER, PA. 19013 Tel: (610) 872-3716		1823 DEEP RUN ROAD PIPERSVILLE, PA. 18947 Tel: (215) 786-0409		1251 ROMANSVILLE ROAD COATESVILLE, PA. 19320 Tel: (610) 383-4460			
Revisions		Date												Approved: Project Director		Location 1400 Black Horse Hill, Coatesville, PA		Drawing Number  AE311		Dwg. 23 of 86	
																Date 03-29-13		Checked TN		Drawn BG	
																				 Department of Veterans Affairs	

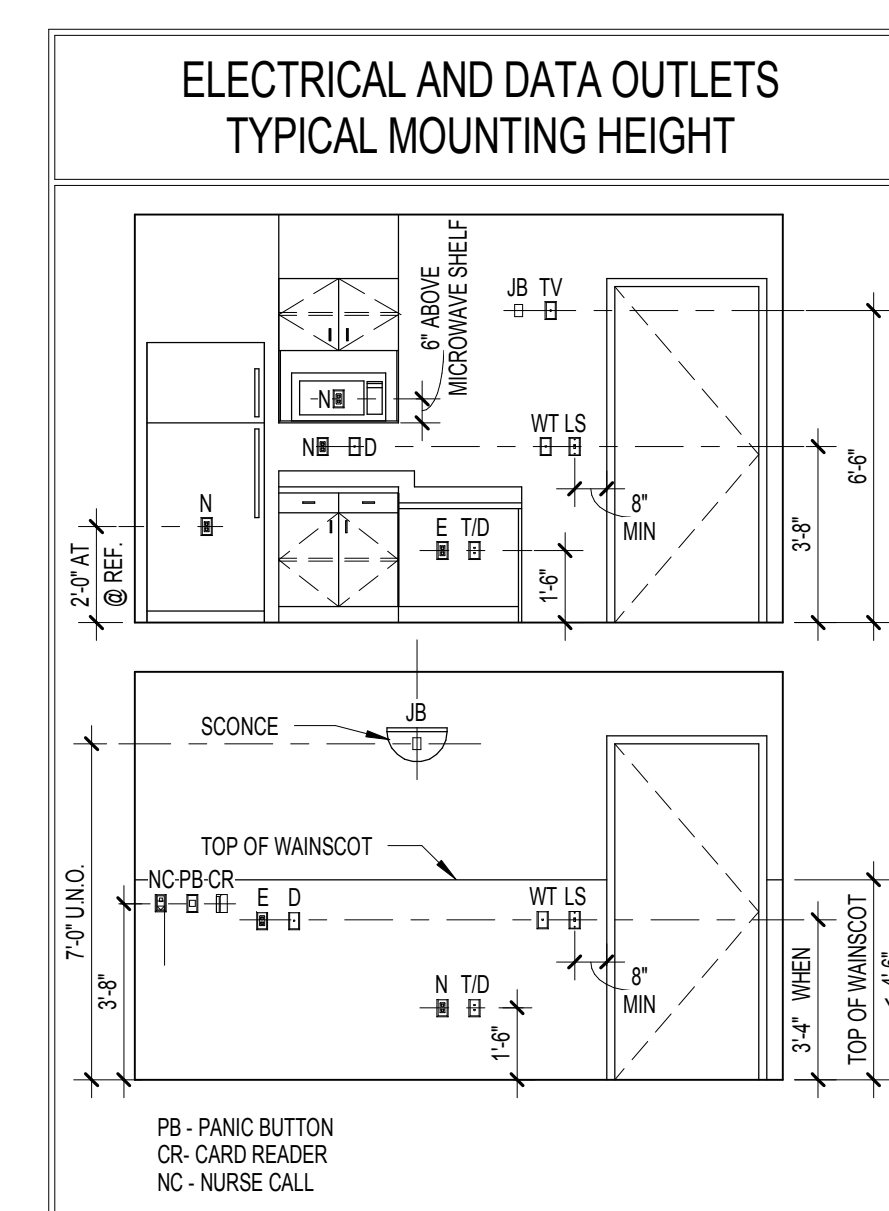
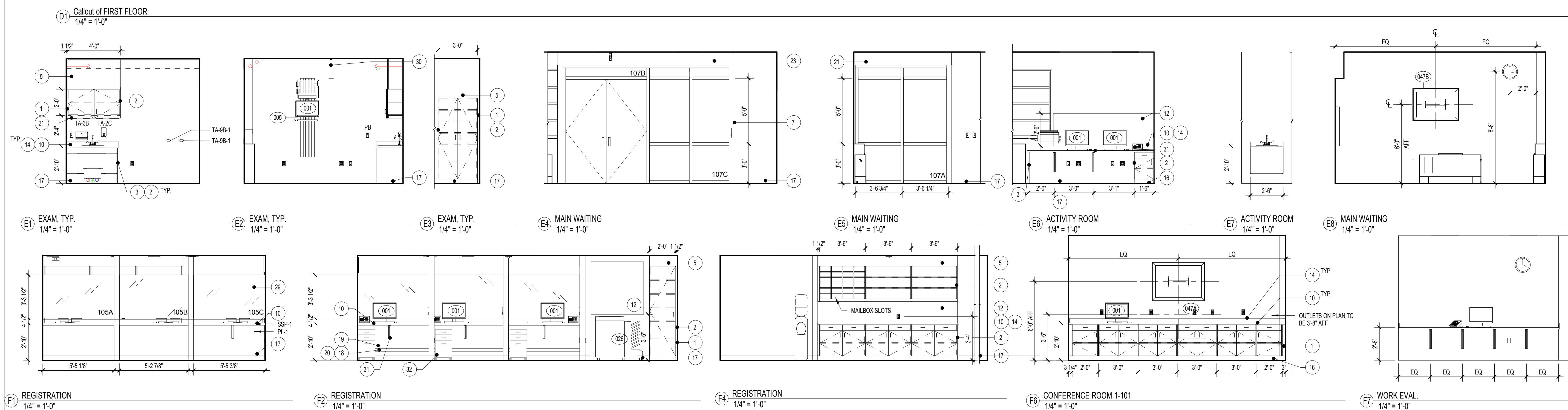


three inches = one foot  
one and one half inches = one foot  
one inch = one foot  
three quarters inch = one foot  
one half inch = one foot  
three eighths inch = one foot  
one quarter inch = one foot  
one eighth inch = one foot



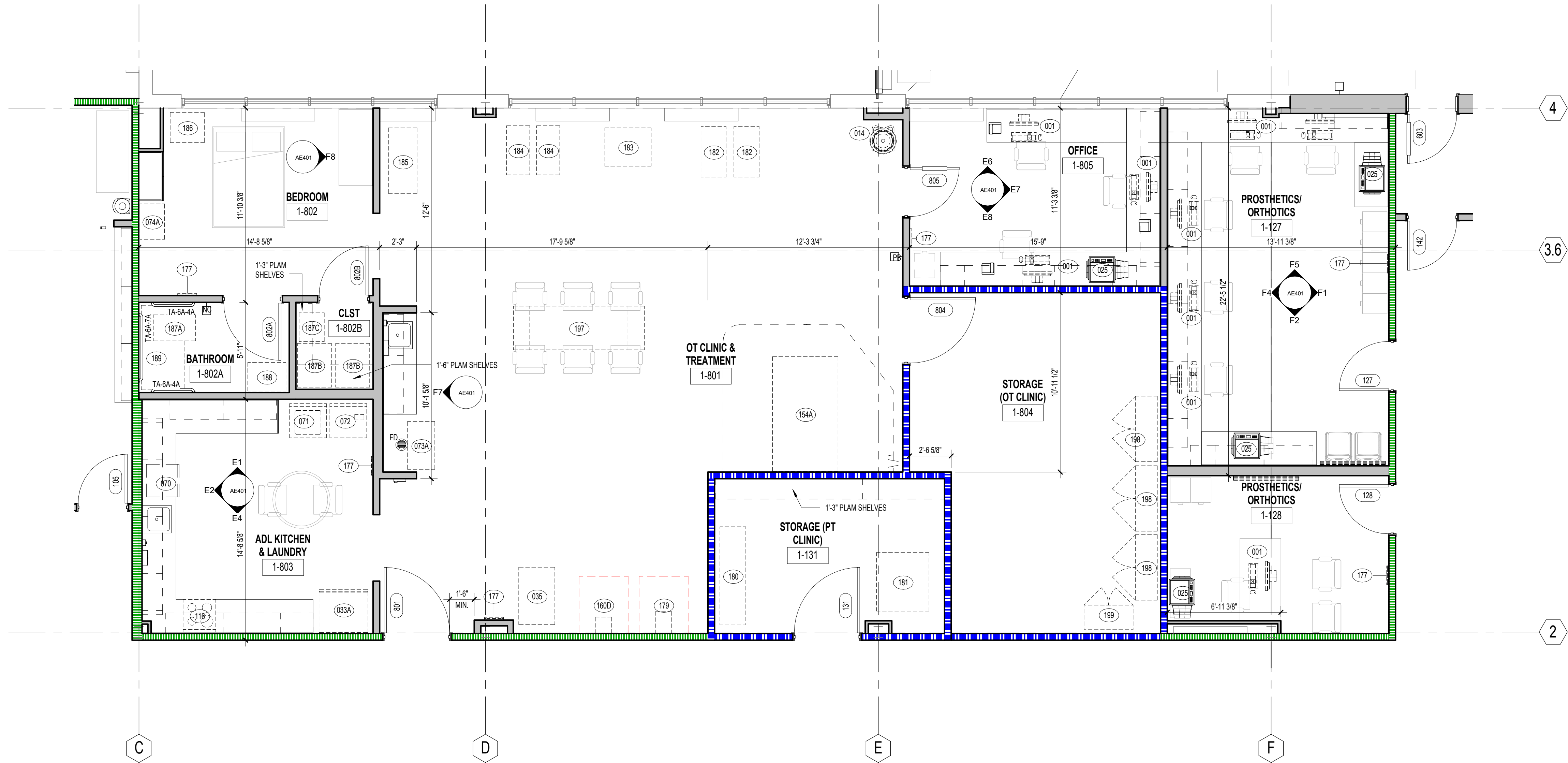
- ARCHITECTURAL GENERAL NOTES**
- SEE SHEET AE704 FOR EQUIPMENT SCHEDULE.
  - SEE SHEET AE701 FOR DOOR SCHEDULE.
  - SEE SHEET AE701 FOR WINDOW SCHEDULE.
  - SEE SHEET AE702 FOR TOILET ACCESSORY SCHEDULE.
  - SEE SHEET AE704 FOR FINISH SCHEDULE.

- INTERIOR ELEVATION KEYNOTES**
- PLASTIC LAMINATE FILLER PANEL.
  - FINISH EXPOSED SIDE OF BASE / WALL CABINET WITH PLASTIC LAMINATE. (TYP.)
  - PLASTIC LAMINATE END PANEL.
  - 1" PLASTIC LAMINATE SUPPORT LEG.
  - PLASTIC LAMINATE FASCIA PANEL ABOVE WALL CABINET, TYPICAL.
  - PLASTIC WALL PROTECTION.
  - CORNER GUARD.
  - HANDRAIL MOUNT TOP AT 3'-0" A.F.F.
  - CRASH RAIL MOUNT TOP AT 3'-0" A.F.F.
  - SOLID SURFACE COUNTERTOP.
  - SOLID SURFACE TRANSACTION SHELF.
  - FABRIC WRAP TACK BOARD.
  - WINDOW SILL TO BE CLEANED AND RETURNED TO ORIGINAL FINISH.
  - 4" HIGH SOLID SURFACE BACK AND SIDE SPLASHES.
  - LOCKER ROOM BENCH, TO BE RELOCATED FROM BUILDING 58.
  - SCHEDULED BASE AT RECESSED TOE KICK.
  - SCHEDULED BASE.
  - CONTINUOUS WIRE MOLD, REFER TO ELECTRICAL DRAWINGS.
  - CONTINUOUS "Z" HANGER.
  - SEGMENTED REMOVABLE ACCESS PANEL.
  - TASK LIGHTING.
  - WALL SCONCE.
  - GYPSON WALLBOARD SOFFIT. COORDINATE HEIGHT WITH SOUND BOOTH SELECTED BY VA.
  - STORAGE CABINET, NOT IN CONTRACT.
  - BOOKCASE, NOT IN CONTRACT.
  - METAL LOCKERS WITH SLOPED TOP, SEE SPECIFICATIONS.
  - GYPSON WALLBOARD SOFFIT.
  - MILLWORK TO BE LOCKABLE.
  - LAMINATE AND TEMPERED GLASS.
  - CUBICLE CURTAIN AND TRACK.
  - METAL SUPPORT BRACKET.
  - FURNITURE, N.I.C.
  - BRICK INFILL TO MATCH EXISTING CONSTRUCTION.
  - EXISTING ELECTRICAL PANEL, TO REMAIN.
  - ROBE HOOK RACK WITH 8 DOUBLE HOOKS.

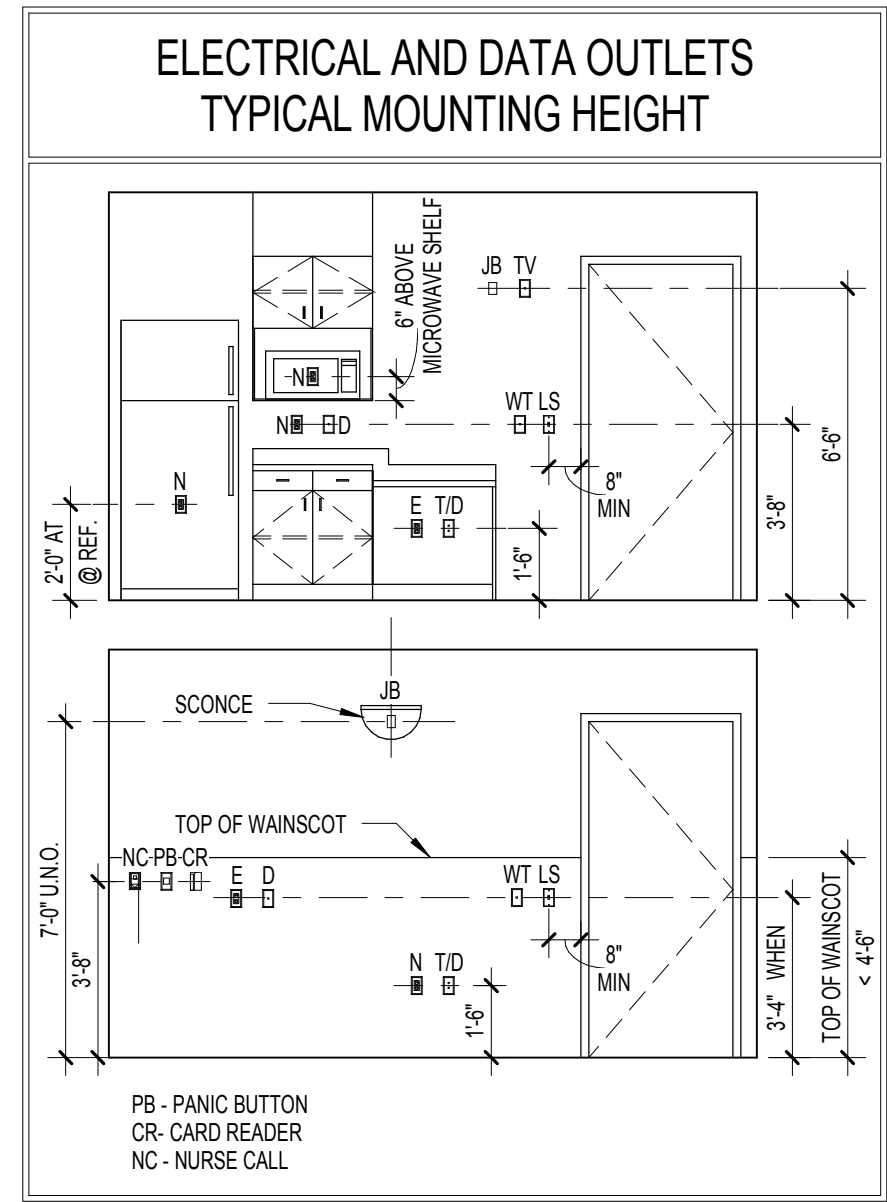


		<div>CONSULTANTS:</div> <table><tr><td><div>Project Manager</div><div>BRAY MOONEY CONSULTING</div><div>410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716</div></td><td><div>Architect</div><div>ARRAY HEALTHCARE FACILITIES SOLUTIONS</div><div>2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA 19406 Tel: (610) 279-5599</div></td><td><div>Structural Engineer</div><div>WZG, STRUCTURAL CONSULTING ENGINEERS</div><div>P.O. BOX 24 40 LITTLE ROAD ZIEGLERVILLE, PA 19422 Tel: (610) 287-3194</div></td><td><div>MEP/FP Engineer</div><div>APOGEE CONSULTING GROUP</div><div>7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC 27606 Tel: (919) 858-7420</div></td><td><div>Civil Engineer</div><div>GUIDON DESIGN</div><div>2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 800-6388</div></td><td><div>Fire Protection Consultant</div><div>HARRINGTON GROUP</div><div>7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC 28227 Tel: (704) 531-9077</div></td><td><div>Cost Estimator</div><div>BRAY MOONEY CONSULTING</div><div>410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716</div></td><td><div>Aquatic Consultant</div><div>ATLANTIC AQUATIC ENGINEERING</div><div>1823 DEEP RUN ROAD PIPERVILLE, PA 18047 Tel: (215) 788-0409</div></td><td><div>Associate Architects</div><div>W. COOK ARCHITECTS</div><div>1251 ROMANVILLE ROAD COATESVILLE, PA 19320 Tel: (610) 383-4460</div></td></tr></table>								<div>Project Manager</div> <div>BRAY MOONEY CONSULTING</div> <div>410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716</div>	<div>Architect</div> <div>ARRAY HEALTHCARE FACILITIES SOLUTIONS</div> <div>2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA 19406 Tel: (610) 279-5599</div>	<div>Structural Engineer</div> <div>WZG, STRUCTURAL CONSULTING ENGINEERS</div> <div>P.O. BOX 24 40 LITTLE ROAD ZIEGLERVILLE, PA 19422 Tel: (610) 287-3194</div>	<div>MEP/FP Engineer</div> <div>APOGEE CONSULTING GROUP</div> <div>7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC 27606 Tel: (919) 858-7420</div>	<div>Civil Engineer</div> <div>GUIDON DESIGN</div> <div>2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 800-6388</div>	<div>Fire Protection Consultant</div> <div>HARRINGTON GROUP</div> <div>7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC 28227 Tel: (704) 531-9077</div>	<div>Cost Estimator</div> <div>BRAY MOONEY CONSULTING</div> <div>410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716</div>	<div>Aquatic Consultant</div> <div>ATLANTIC AQUATIC ENGINEERING</div> <div>1823 DEEP RUN ROAD PIPERVILLE, PA 18047 Tel: (215) 788-0409</div>	<div>Associate Architects</div> <div>W. COOK ARCHITECTS</div> <div>1251 ROMANVILLE ROAD COATESVILLE, PA 19320 Tel: (610) 383-4460</div>	<div>PROJECT MANAGER:</div> <div><div>Bray Mooney Consulting</div></div>		<div>Project Number</div> <div>3627</div>	<div>Scale</div> <div>As indicated</div>	<div>Drawing Title</div> <div>FIRST FLOOR ENLARGED PLAN - ADMINISTRATION</div>		<div>Project Title</div> <div>RENOVATE BUILDING 69</div>		<div>VA Project Number</div> <div>542-CSI-203</div>	<div>Office of Facilities Management</div> <div><div></div><div>Department of Veterans Affairs</div></div>
<div>Project Manager</div> <div>BRAY MOONEY CONSULTING</div> <div>410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716</div>	<div>Architect</div> <div>ARRAY HEALTHCARE FACILITIES SOLUTIONS</div> <div>2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA 19406 Tel: (610) 279-5599</div>	<div>Structural Engineer</div> <div>WZG, STRUCTURAL CONSULTING ENGINEERS</div> <div>P.O. BOX 24 40 LITTLE ROAD ZIEGLERVILLE, PA 19422 Tel: (610) 287-3194</div>	<div>MEP/FP Engineer</div> <div>APOGEE CONSULTING GROUP</div> <div>7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC 27606 Tel: (919) 858-7420</div>	<div>Civil Engineer</div> <div>GUIDON DESIGN</div> <div>2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 800-6388</div>	<div>Fire Protection Consultant</div> <div>HARRINGTON GROUP</div> <div>7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC 28227 Tel: (704) 531-9077</div>	<div>Cost Estimator</div> <div>BRAY MOONEY CONSULTING</div> <div>410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716</div>	<div>Aquatic Consultant</div> <div>ATLANTIC AQUATIC ENGINEERING</div> <div>1823 DEEP RUN ROAD PIPERVILLE, PA 18047 Tel: (215) 788-0409</div>	<div>Associate Architects</div> <div>W. COOK ARCHITECTS</div> <div>1251 ROMANVILLE ROAD COATESVILLE, PA 19320 Tel: (610) 383-4460</div>																				
				<div>Approved: Project Director</div>		<div>Location</div> <div>1400 Black Horse Hill, Coatesville, PA</div>		<div>Building Number</div> <div>69</div>	<div>Drawing Number</div> <div>AE400</div>																			
						<div>Date</div> <div>03-29-13</div>	<div>Checked</div> <div>TN</div>	<div>Drawn</div> <div>BG</div>	<div>Dwg. 23 of 98</div>																			
<div>Revisions</div>	<div>Date</div>																											





(C) ENLARGED FLOOR PLAN - OCCUPATIONAL THERAPY CLINIC  
1/4" = 1'-0"

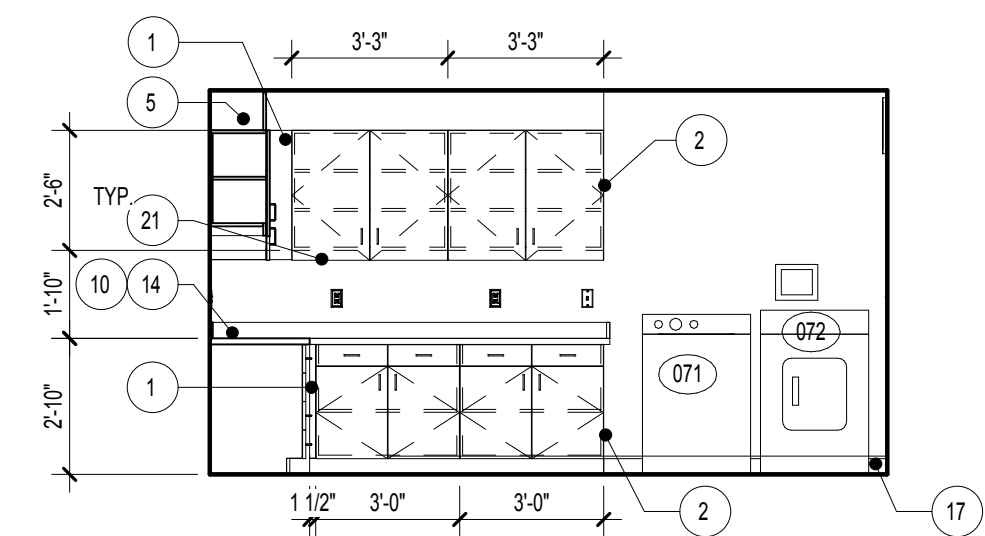


#### ARCHITECTURAL GENERAL NOTES

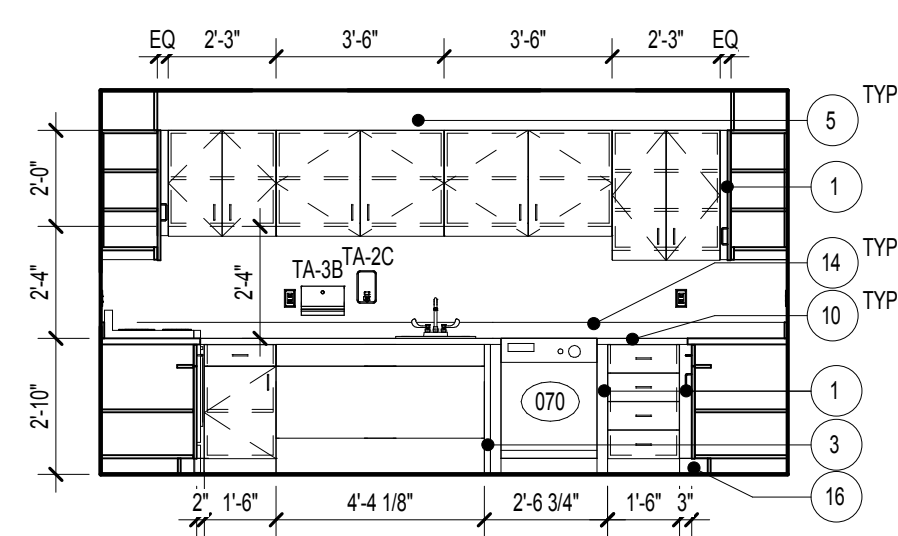
1. SEE SHEET AE704 FOR EQUIPMENT SCHEDULE.
2. SEE SHEET AE701 FOR DOOR SCHEDULE.
3. SEE SHEET AE701 FOR WINDOW SCHEDULE.
4. SEE SHEET AE702 FOR TOILET ACCESSORY SCHEDULE.
5. SEE SHEET AE704 FOR FINISH SCHEDULE.

#### INTERIOR ELEVATION KEYNOTES

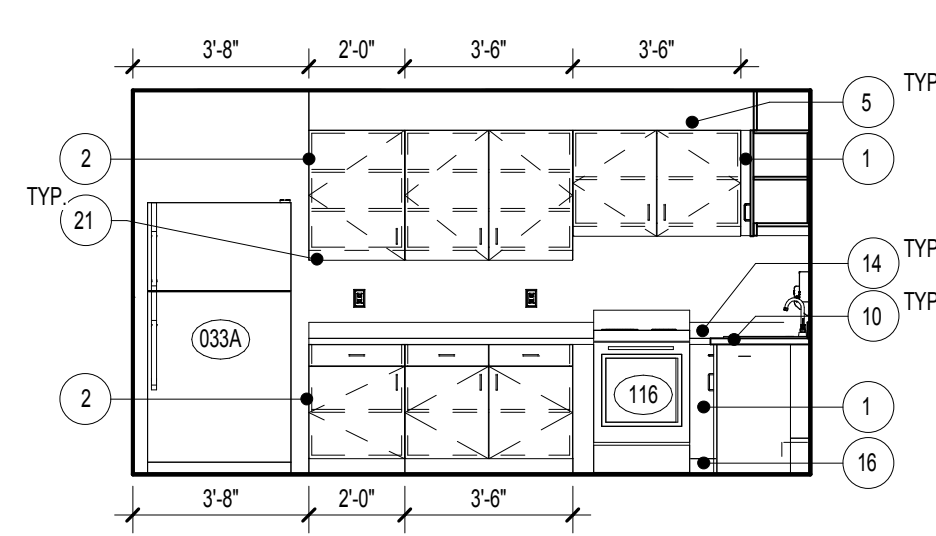
1. PLASTIC LAMINATE FILLER PANEL.
2. FINISH EXPOSED SIDE OF BASE / WALL CABINET WITH PLASTIC LAMINATE (TYP).
3. PLASTIC LAMINATE END PANEL.
4. 1" PLASTIC LAMINATE SUPPORT LEG.
5. PLASTIC LAMINATE FASCIA PANEL ABOVE WALL CABINET, TYPICAL.
6. PLASTIC WALL PROTECTION.
7. CORNER GUARD.
8. HANDRAIL, MOUNT TOP AT 3'-0" A.F.F.
9. CRASH RAIL, MOUNT TOP AT 3'-0" A.F.F.
10. SOLID SURFACE COUNTERTOP.
11. SOLID SURFACE TRANSACTION SHELF.
12. FABRIC WRAP TACK BOARD.
13. WINDOW SILL TO BE CLEANED AND RETURNED TO ORIGINAL FINISH.
14. 4" HIGH SOLID SURFACE BACK AND SIDE SPLASHES.
15. LOCKER ROOM BENCH, TO BE RELOCATED FROM BUILDING 58.
16. SCHEDULED BASE AT RECESSED TOE KICK.
17. SCHEDULED BASE.
18. CONTINUOUS WIRE MOLD, REFER TO ELECTRICAL DRAWINGS.
19. CONTINUOUS 1" HANGER.
20. SEGMENTED REMOVABLE ACCESS PANEL.
21. TASK LIGHTING.
22. WALL SCONCE.
23. GYPSUM WALLBOARD SOFFIT. COORDINATE HEIGHT WITH SOUND BOOTH SELECTED BY AIA.
24. STORAGE CABINET, NOT IN CONTRACT.
25. BOOKCASE, NOT IN CONTRACT.
26. METAL LOCKERS WITH SLOPED TOP, SEE SPECIFICATIONS.
27. GYPSUM WALLBOARD SOFFIT.
28. MILLWORK TO BE LOOKABLE.
29. LAMINATE AND TEMPERED GLASS.
30. CUBICLE CURTAIN AND TRACK.
31. METAL SUPPORT BRACKET.
32. FURNITURE, N.I.C.
33. BRICK INFILL TO MATCH EXISTING CONSTRUCTION.
34. EXISTING ELECTRICAL PANEL, TO REMAIN.
35. ROBE HOOK RACK WITH 8 DOUBLE HOOKS.



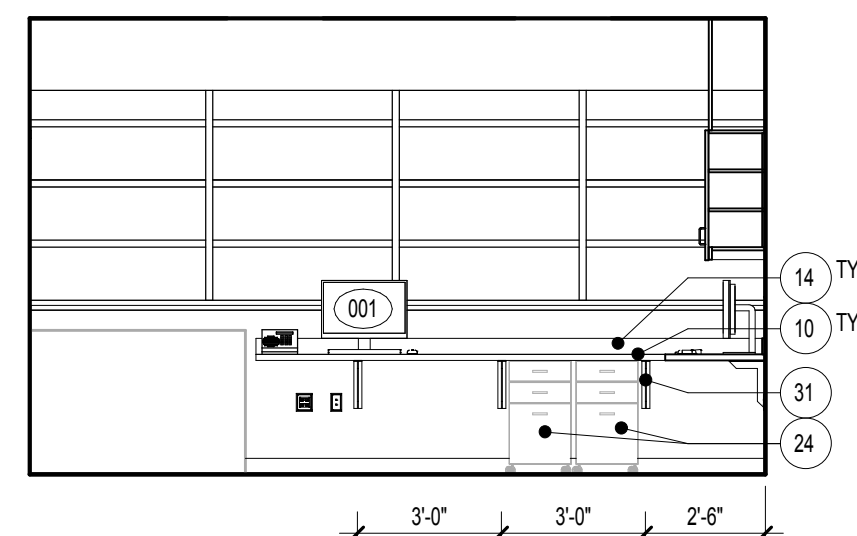
(E) KITCHEN & LAUNDRY 1-803  
1/4" = 1'-0"



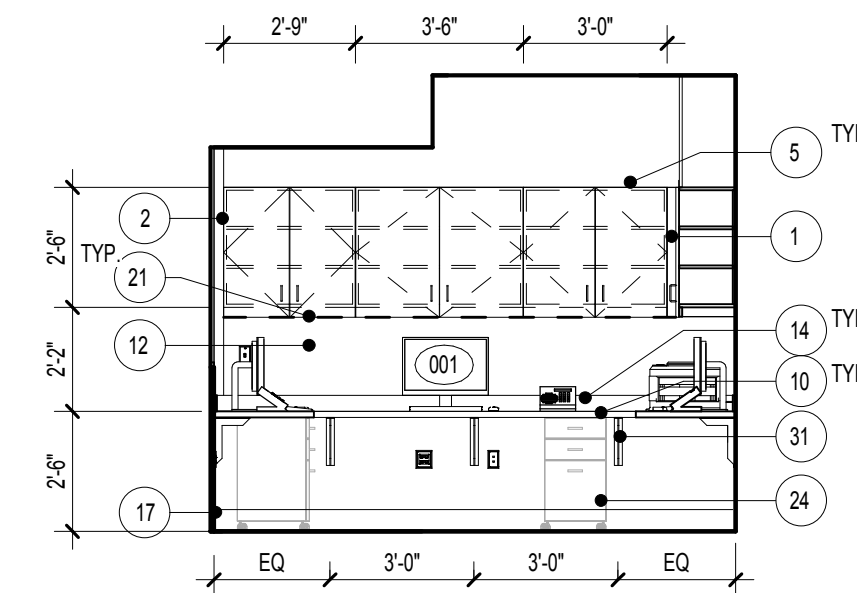
(E) KITCHEN & LAUNDRY 1-803  
1/4" = 1'-0"



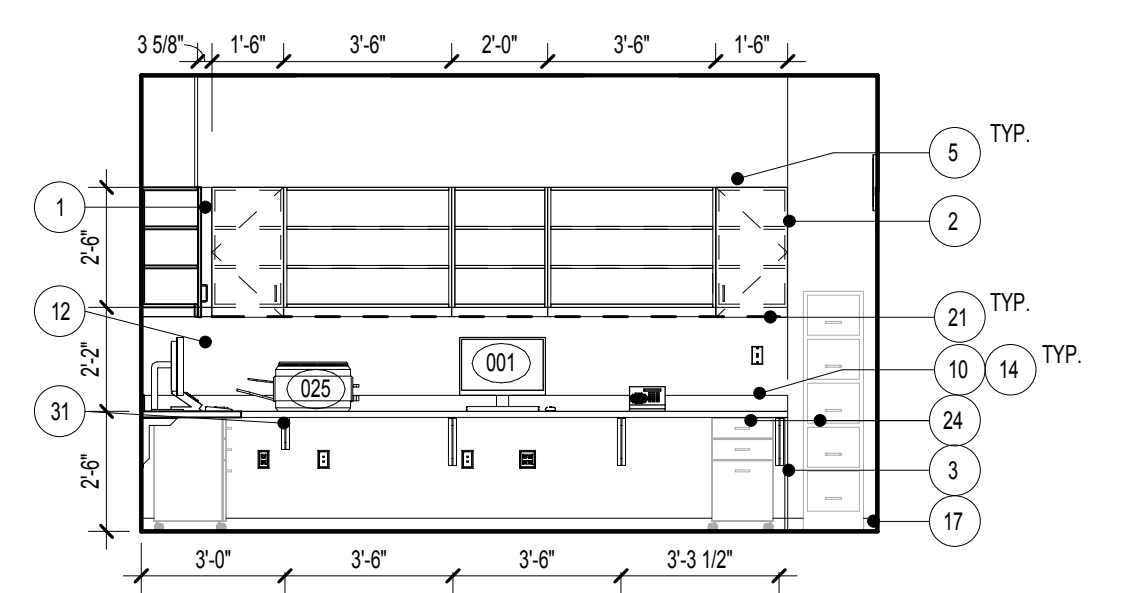
(E) KITCHEN & LAUNDRY 1-803  
1/4" = 1'-0"



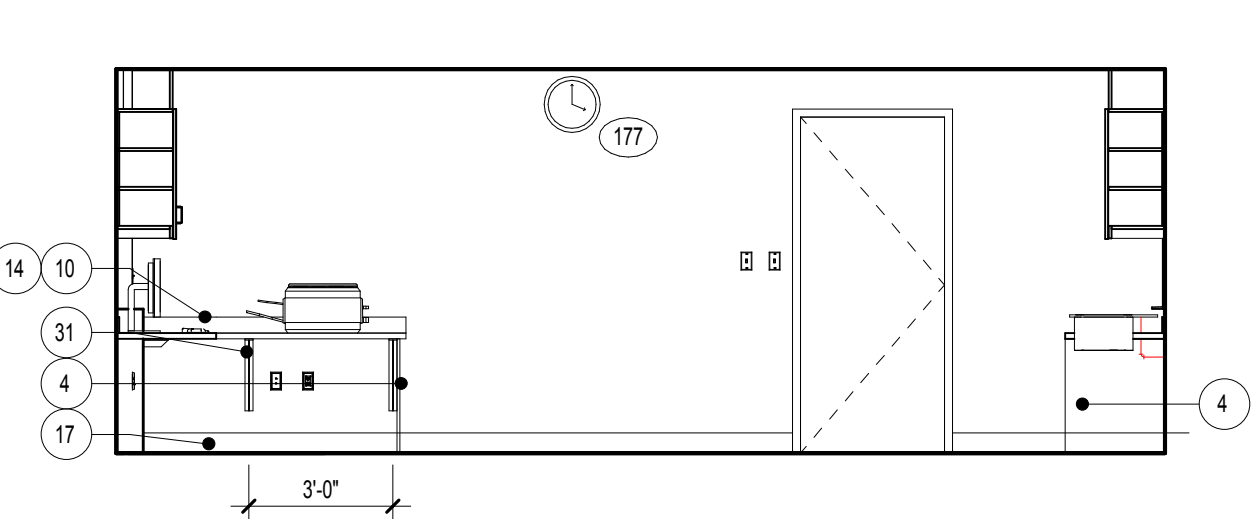
(E) OFFICE 1-805  
1/4" = 1'-0"



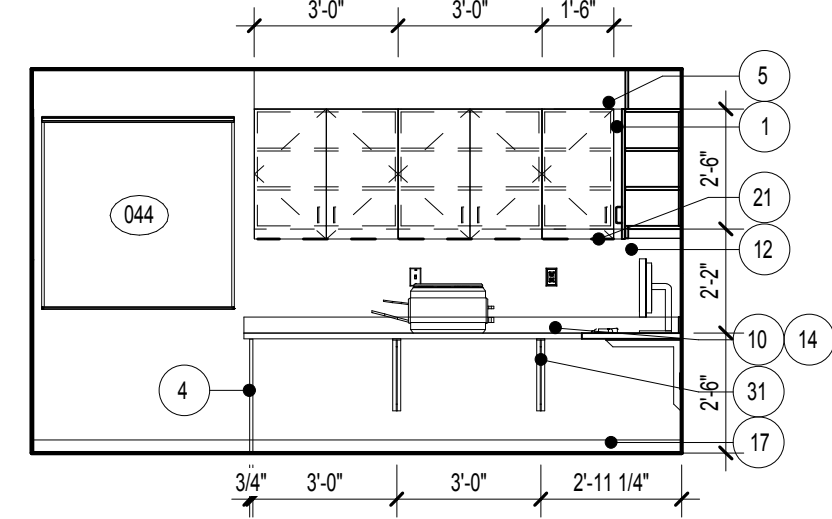
(E) OFFICE 1-805  
1/4" = 1'-0"



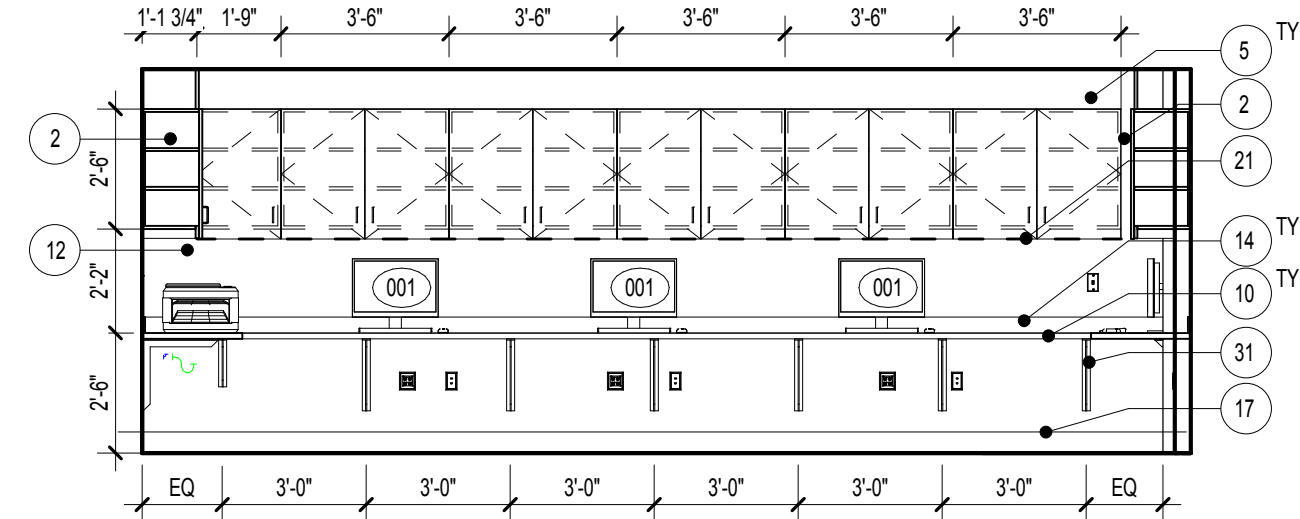
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1/4" = 1'-0"



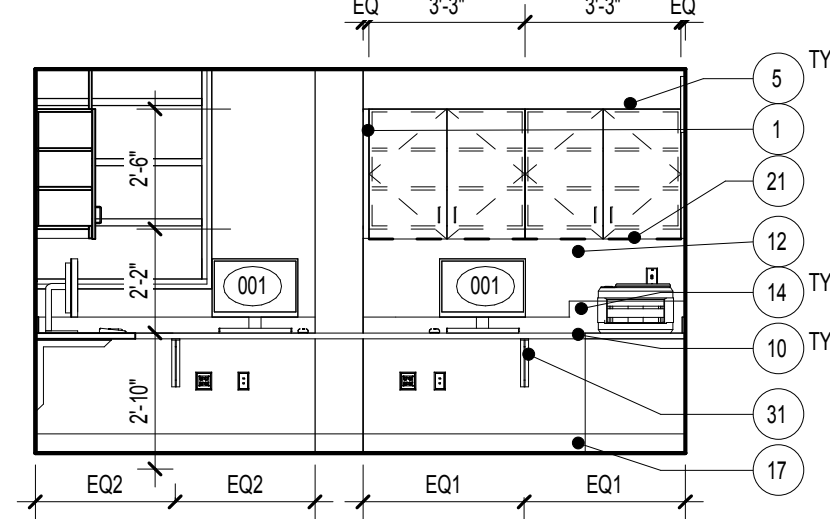
(F) PROSTHETICS / ORTHOTICS 1-127  
1/4" = 1'-0"



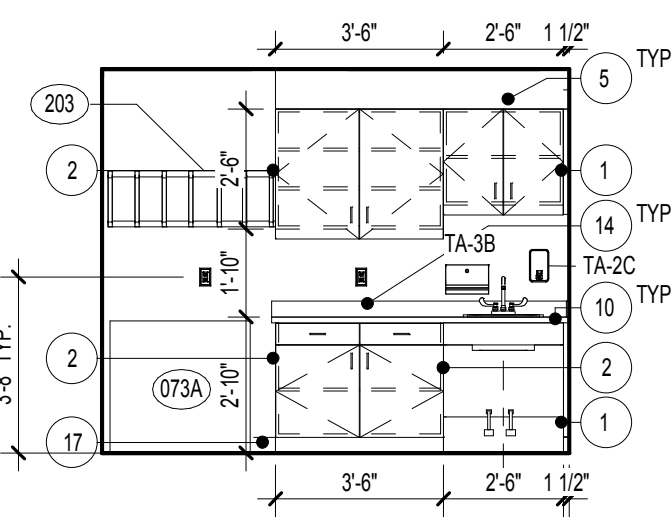
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1/4" = 1'-0"



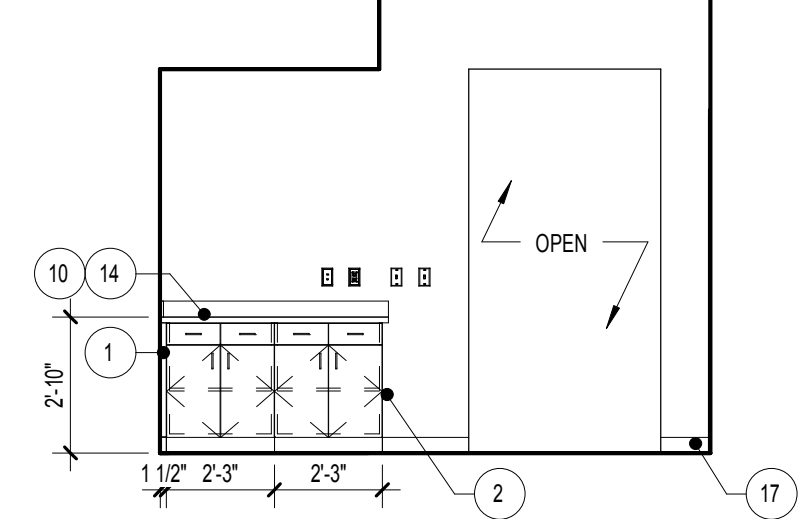
(F) PROSTHETICS / ORTHOTICS 1-127  
1/4" = 1'-0"



(F) PROSTHETICS / ORTHOTICS 1-127  
1/4" = 1'-0"



(F) OCCUPATIONAL THERAPY 1-801  
1/4" = 1'-0"



(F) BEDROOM  
1/4" = 1'-0"

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#### PROJECT MANAGER:

**Bray Mooney Consulting**

Project Number  
3627

Scale  
As indicated

Drawing Title  
FIRST FLOOR ENLARGED PLAN - PROSTHETICS AND OCCUPATIONAL THERAPY CLINIC

Approved: Project Director

Project Title  
RENOVATE BUILDING 69

Location  
1400 Black Horse Hill, Coatesville, PA

Date  
03-29-13

Checked  
TN

Drawn  
BG

VA Contract Number  
542-CSI-203

Building Number  
69

Drawing Number  
AE401

Dwg. 24 of 86

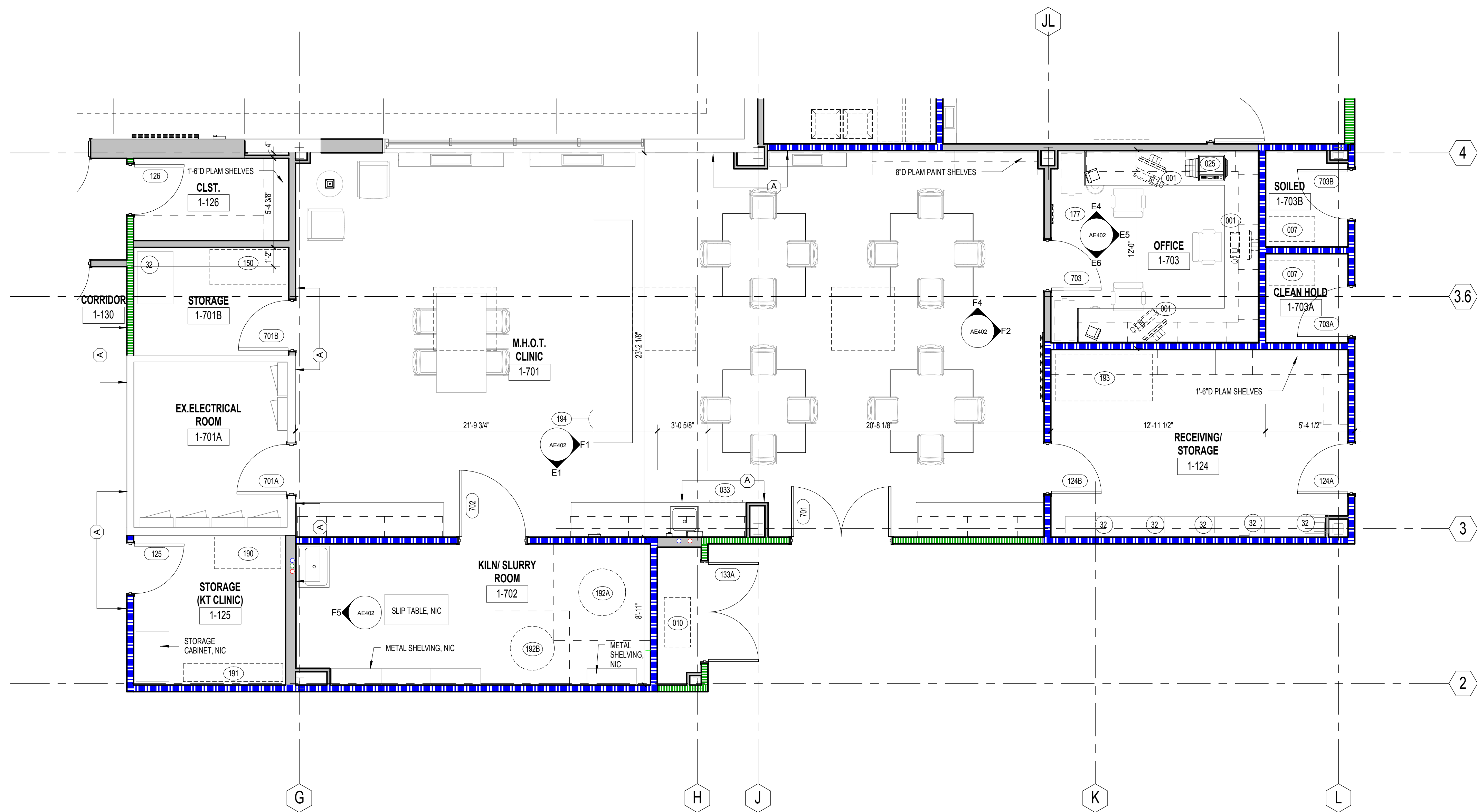
Office of Facilities Management

Department of Veterans Affairs

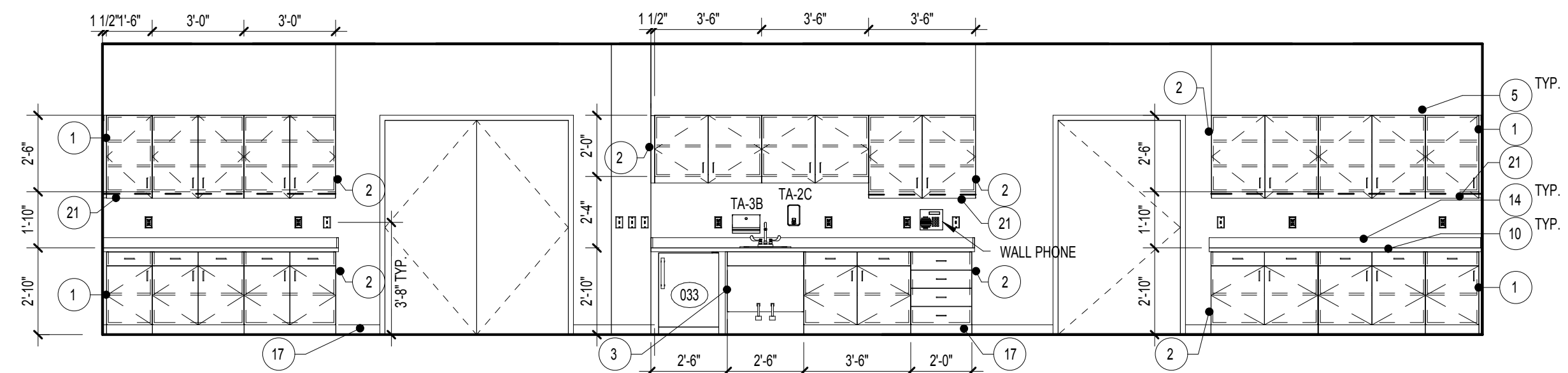
NOTE: SEE SHEET AE-002 FOR DEDUCT ALTERNATES ISSUED FOR BID

FULLY SPRINKLERED

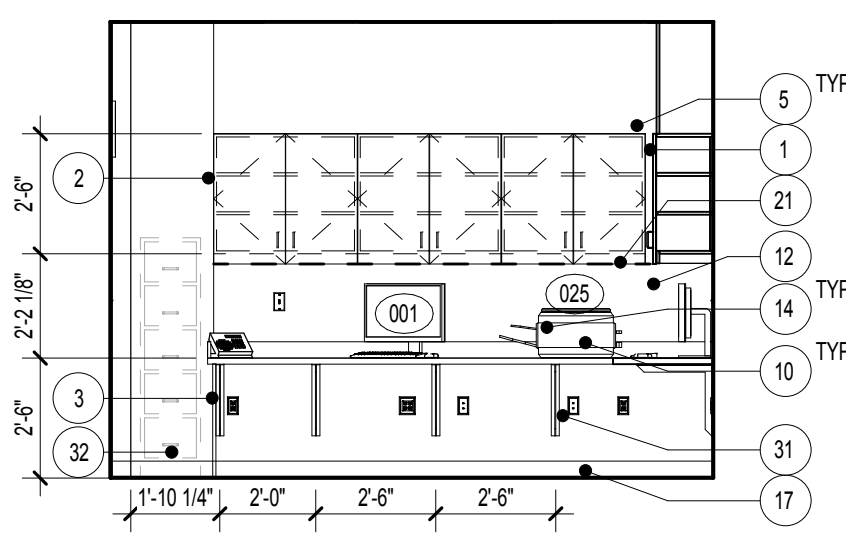




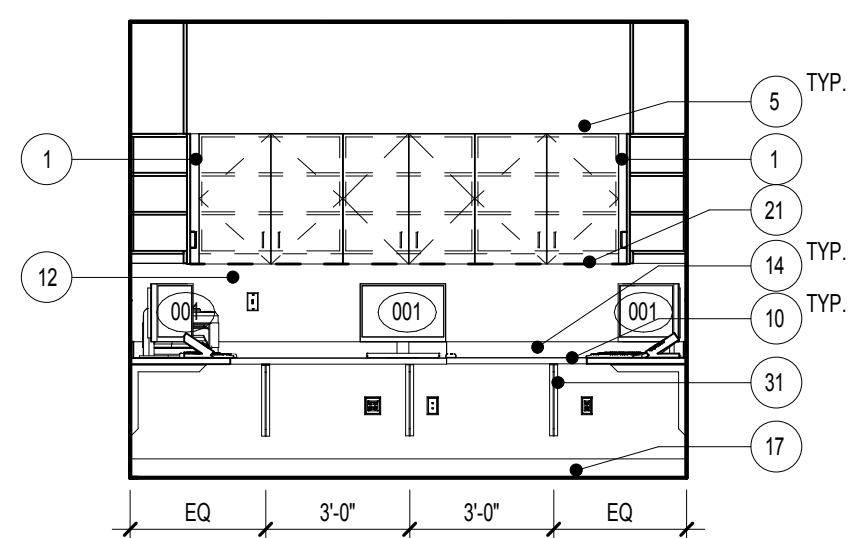
C1 ENLARGED FLOOR PLAN - MENTAL HEALTH OCCUPATIONAL THERAPY CLINIC  
1/4" = 1'-0"



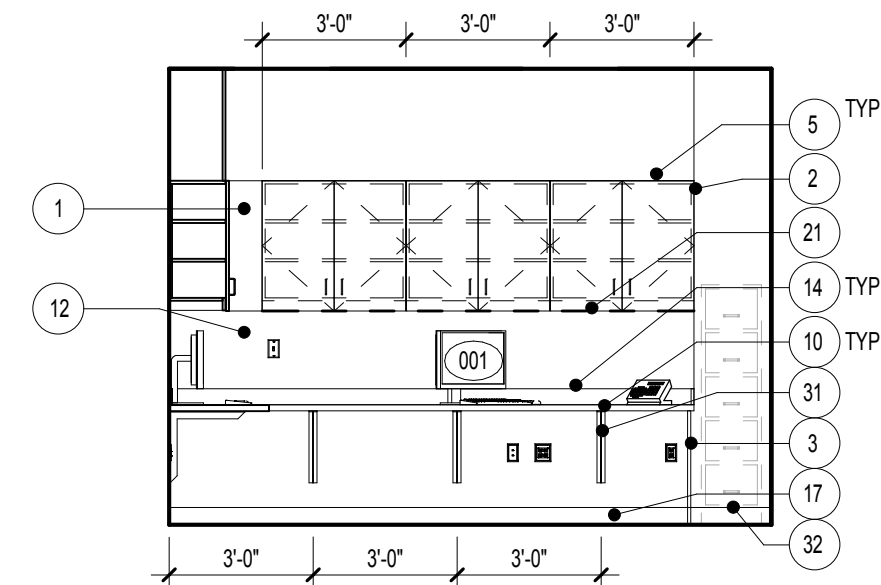
E1 M.H.O.T. CLINIC 1-701  
1/4" = 1'-0"



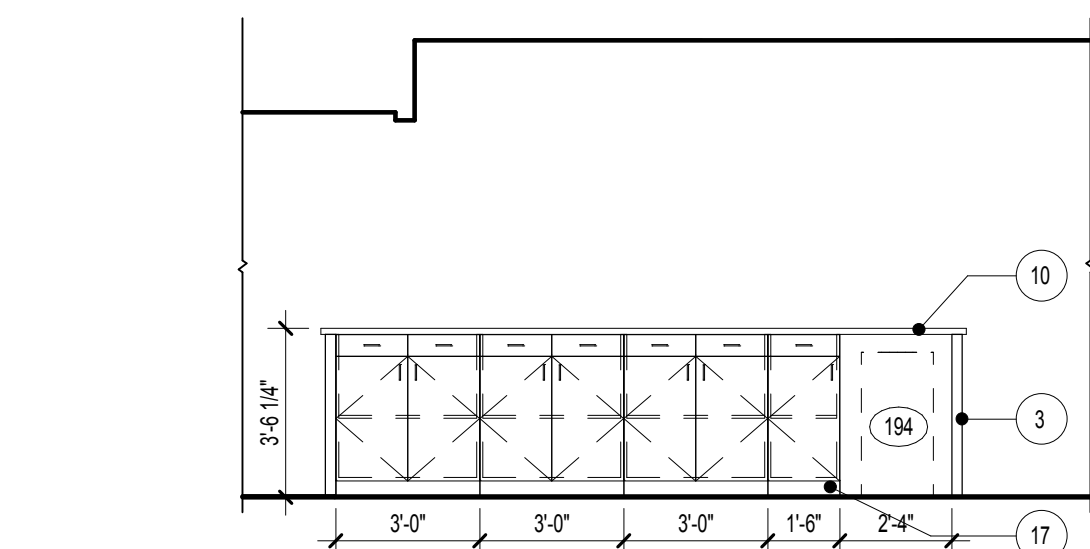
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1/4" = 1'-0"



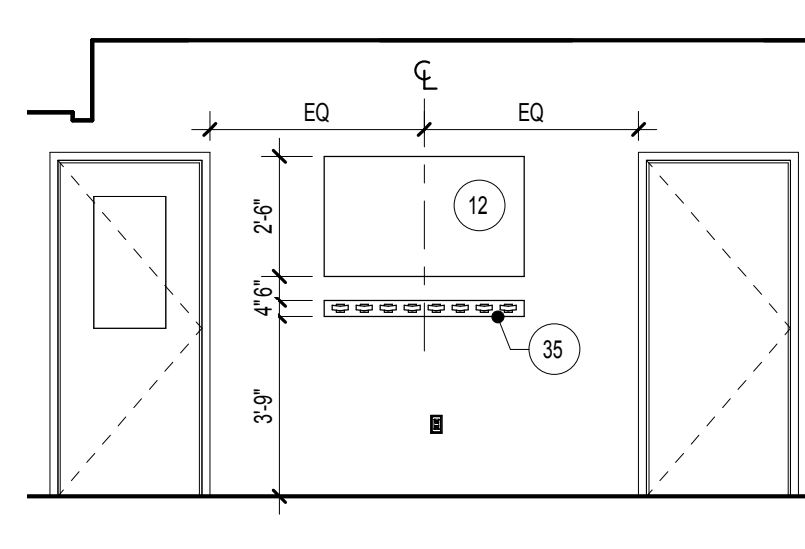
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1/4" = 1'-0"



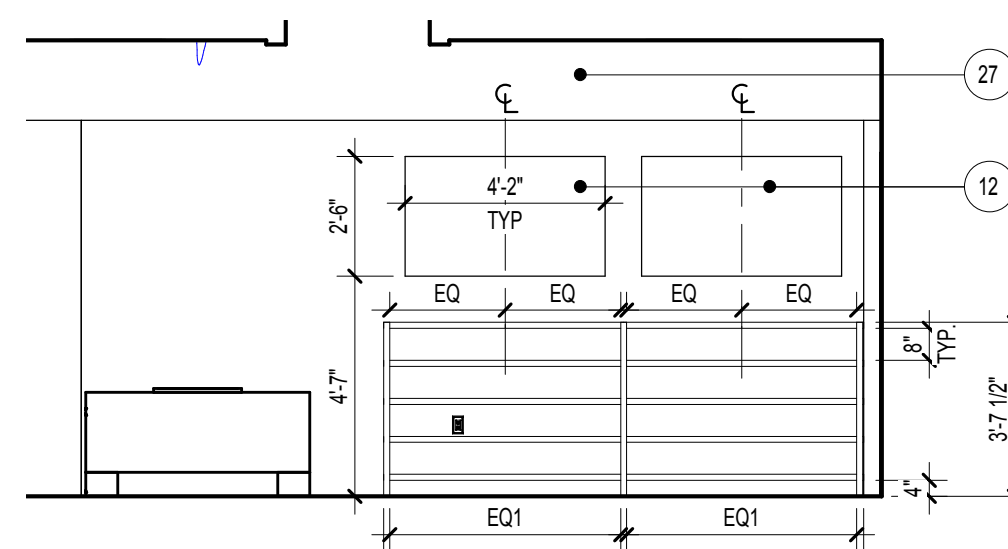
E6 OFFICE 1-703  
1/4" = 1'-0"



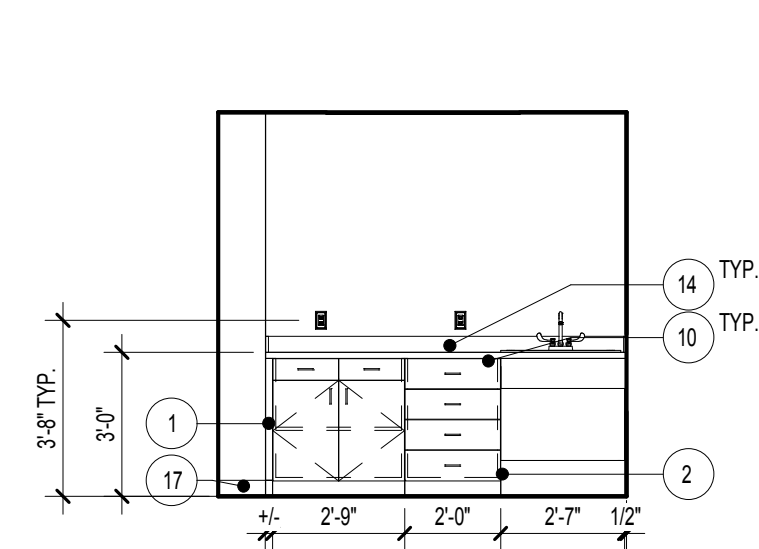
F1 M.H.O.T. CLINIC 1-701  
1/4" = 1'-0"



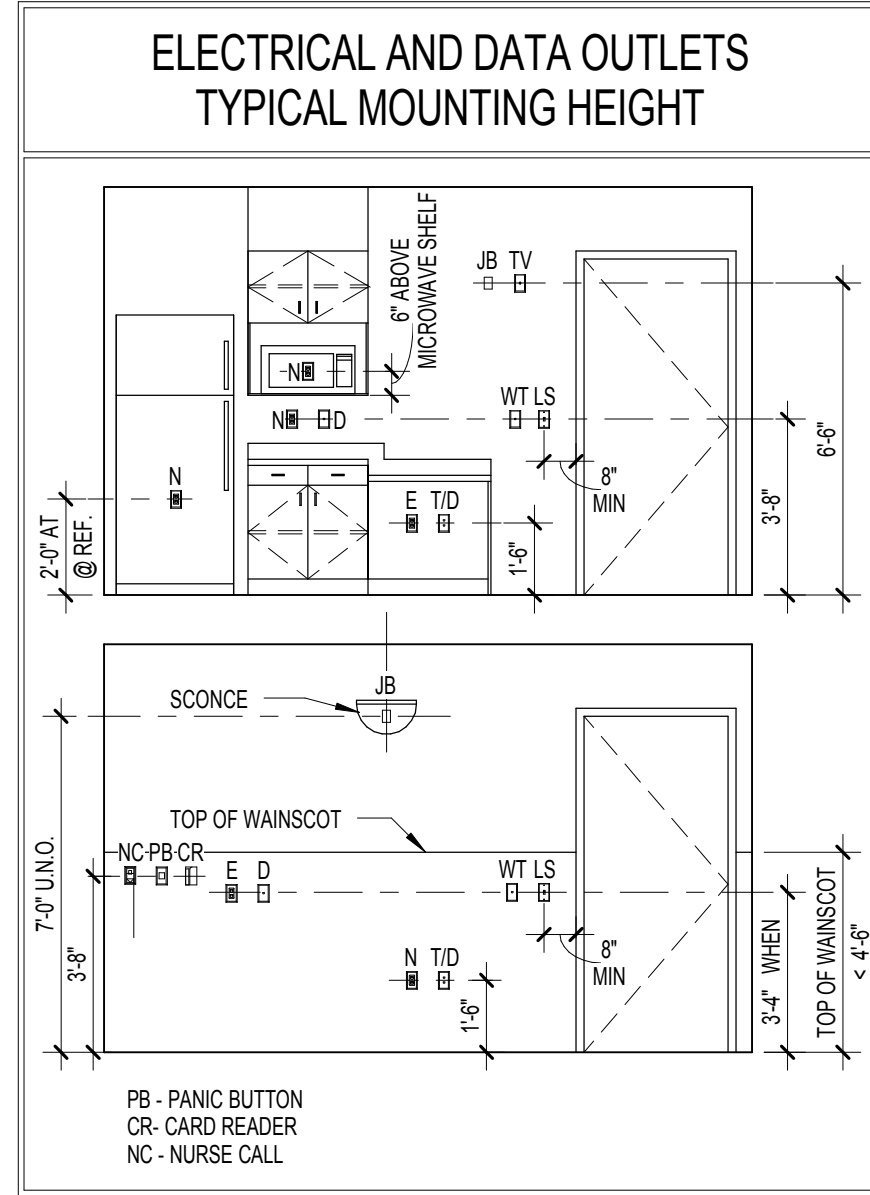
F2 M.H.O.T. CLINIC 1-701  
1/4" = 1'-0"



F4 M.H.O.T. CLINIC 1-701  
1/4" = 1'-0"



F5 KILN / SLURRY ROOM 1-702  
1/4" = 1'-0"



#### ARCHITECTURAL GENERAL NOTES

1. SEE SHEET AE704 FOR EQUIPMENT SCHEDULE.
2. SEE SHEET AE701 FOR DOOR SCHEDULE.
3. SEE SHEET AE701 FOR WINDOW SCHEDULE.
4. SEE SHEET AE702 FOR TOILET ACCESSORY SCHEDULE.
5. SEE SHEET AE704 FOR FINISH SCHEDULE.

#### INTERIOR ELEVATION KEYNOTES

1. PLASTIC LAMINATE FILLER PANEL.
2. FINISH EXPOSED SIDE OF BASE / WALL CABINET WITH PLASTIC LAMINATE (TYP).
3. PLASTIC LAMINATE END PANEL.
4. 1" PLASTIC LAMINATE SUPPORT LEG.
5. PLASTIC LAMINATE FASCIA PANEL ABOVE WALL CABINET, TYPICAL.
6. PLASTIC WALL PROTECTION.
7. CORNER GUARD.
8. HANDRAIL, MOUNT TOP AT 3'-0" A.F.F.
9. CRASH RAIL, MOUNT TOP AT 3'-0" A.F.F.
10. SOLID SURFACE COUNTERTOP.
11. SOLID SURFACE TRANSACTION SHELF.
12. FABRIC WRAP TACK BOARD.
13. WINDOW SILL TO BE CLEANED AND RETURNED TO ORIGINAL FINISH.
14. 4" HIGH SOLID SURFACE BACK AND SIDE SPLASHES.
15. LOCKER ROOM BENCH, TO BE RELOCATED FROM BUILDING 58.
16. SCHEDULED BASE AT RECESSED TOE KICK.
17. SCHEDULED BASE.
18. CONTINUOUS WIRE MOLD, REFER TO ELECTRICAL DRAWINGS.
19. CONTINUOUS "J" HANGER.
20. SEGMENTED REMOVABLE ACCESS PANEL.
21. TASK LIGHTING.
22. WALL SCONCE.
23. GYPSUM WALLBOARD SOFFIT, COORDINATE HEIGHT WITH SOUND BOOTH SELECTED BY VA.
24. STORAGE CABINET, NOT IN CONTRACT.
25. BOOKCASE, NOT IN CONTRACT.
26. METAL LOCKERS WITH SLOPED TOP, SEE SPECIFICATIONS.
27. GYPSUM WALLBOARD SOFFIT.
28. MILLWORK TO BE LOCKABLE.
29. LAMINATE AND TEMPERED GLASS.
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31. METAL SUPPORT BRACKET.
32. FURNITURE, N/C.
33. BRICK INFILL TO MATCH EXISTING CONSTRUCTION.
34. EXISTING ELECTRICAL PANEL, TO REMAIN.
35. ROBE HOOK RACK WITH 8 DOUBLE HOOKS.

FULLY SPRINKLERED  
NOTE: SEE SHEET AE-002 FOR DEDUCT ALTERNATES ISSUED FOR BID

#### CONSULTANTS:

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Tel: (215) 786-0409

**Associate Architects**  
W. COOK ARCHITECTS

1251 ROMANSVILLE ROAD  
COATESVILLE, PA. 19320  
Tel: (610) 383-4460

#### PROJECT MANAGER:

**Bray Mooney Consulting**

Project Number  
3627

Scale  
As indicated

Drawing Title  
FIRST FLOOR ENLARGED PLAN - MENTAL HEALTH OCCUPATIONAL THERAPY CLINIC

Approved: Project Director

Project Title  
RENOVATE BUILDING 69

Location  
1400 Black Horse Hill, Coatesville, PA

Date  
03-29-13

Checked  
TN

Drawn  
BG

VA Project Number  
542-CSI-203

Building Number  
69

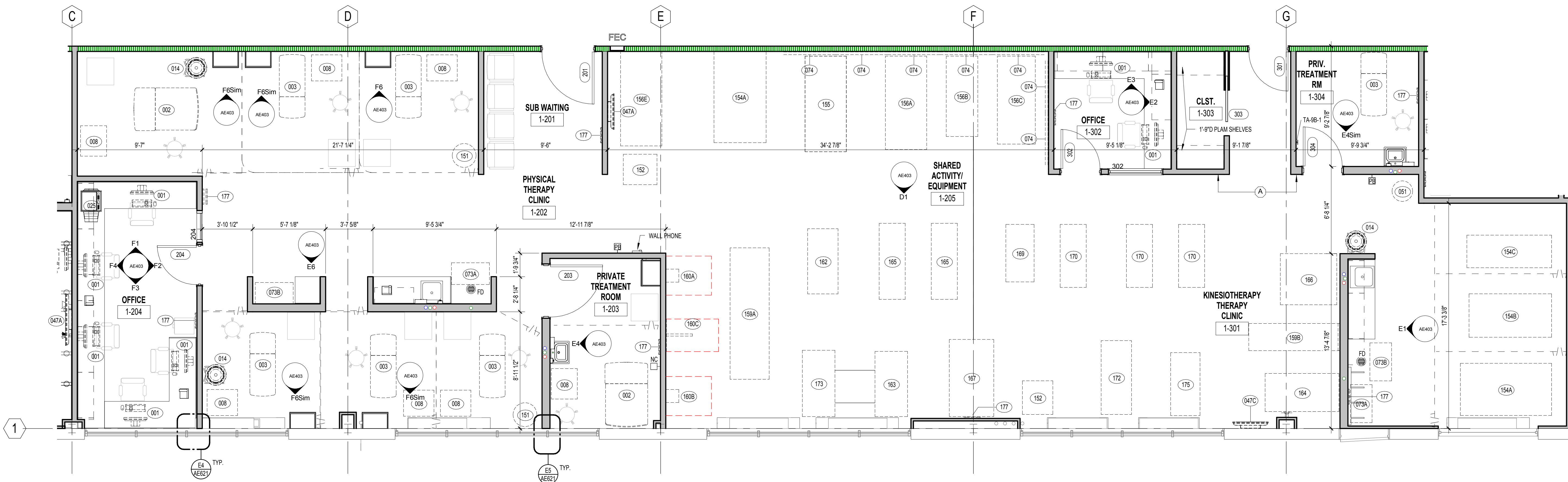
Drawing Number  
AE402

Dwg. 25 of 86

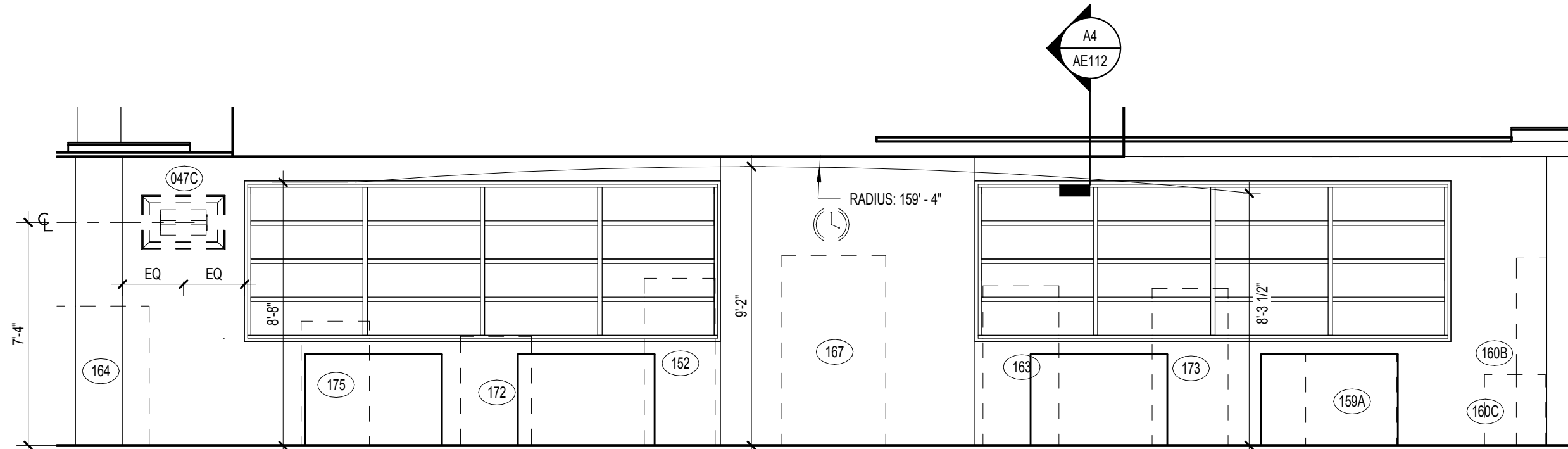
Office of  
Facilities  
Management

Department of  
Veterans Affairs

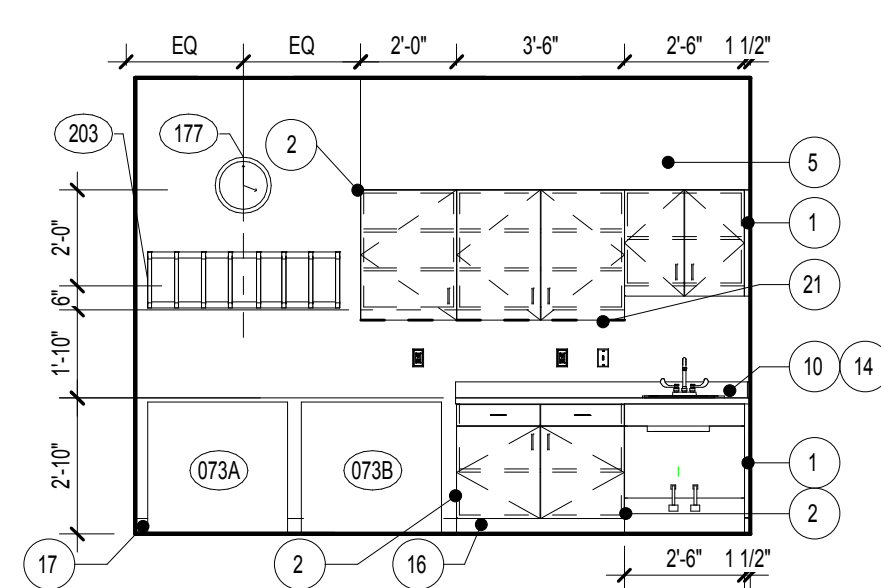




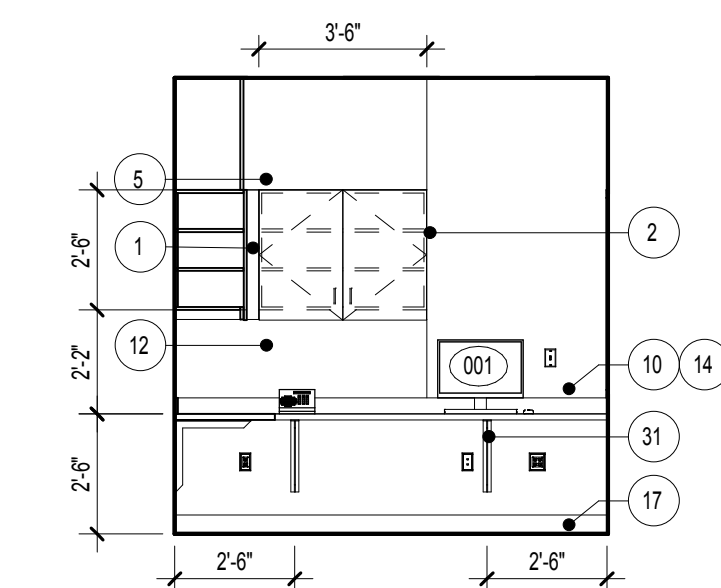
C1 ENLARGED FLOOR PLAN - PHYSICAL THERAPY CLINIC  
1/4" = 1'-0"



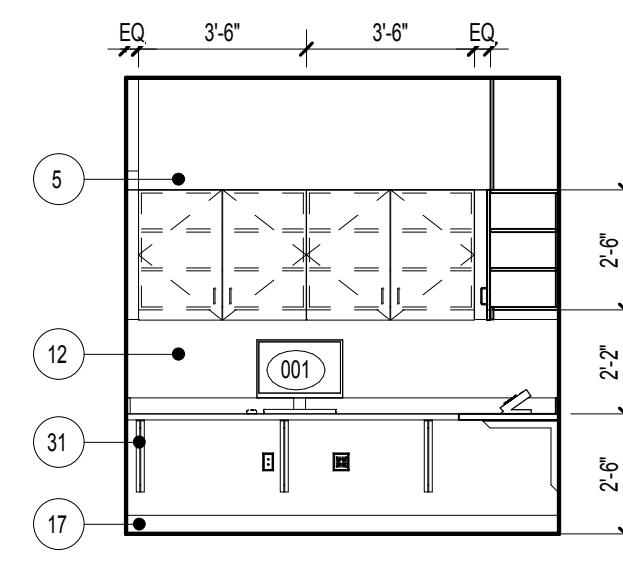
D1 SHARED ACTIVITY/EQUIPMENT  
1/4" = 1'-0"



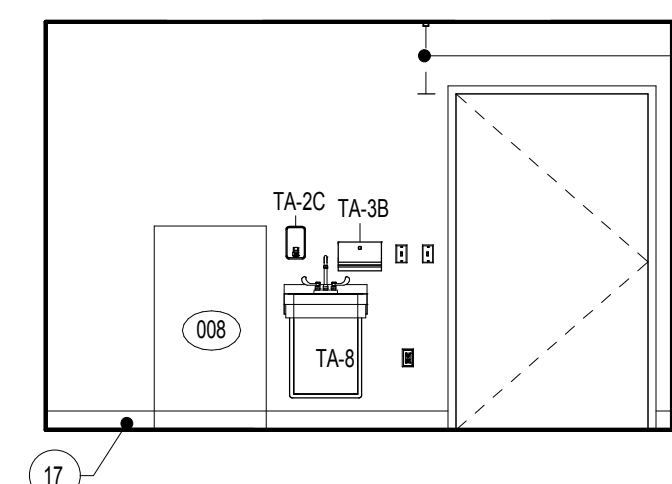
E1 KT CLINIC  
1/4" = 1'-0"



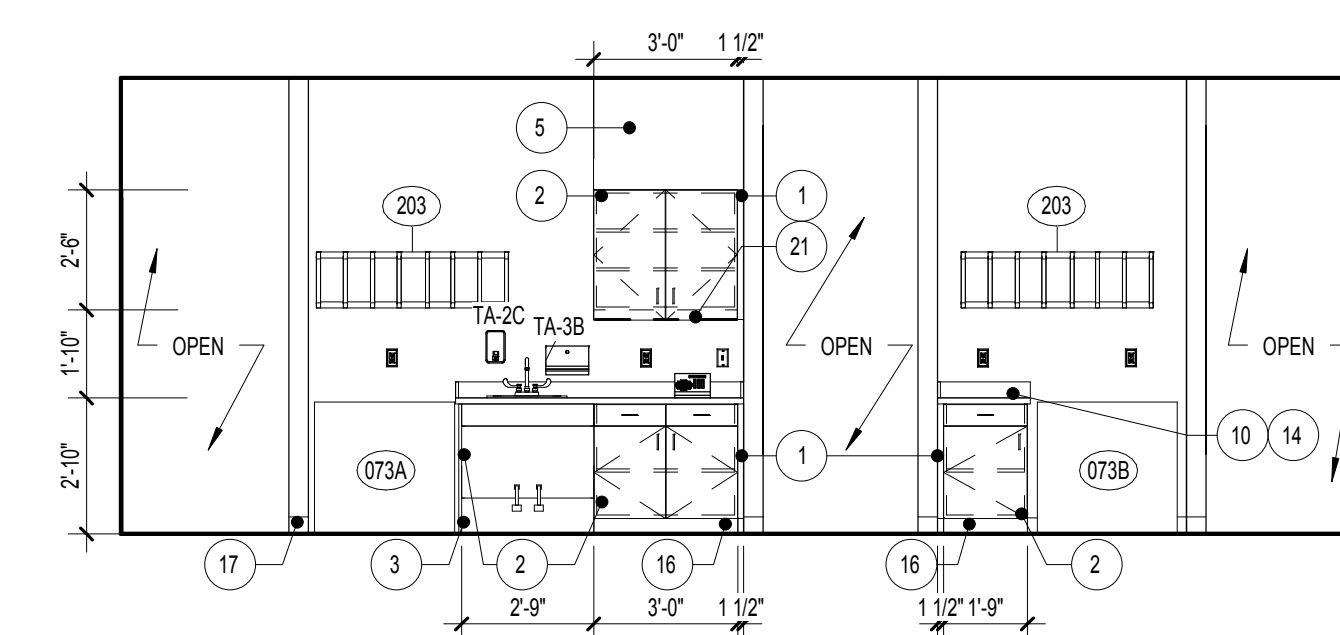
E2 OFFICE  
1/4" = 1'-0"



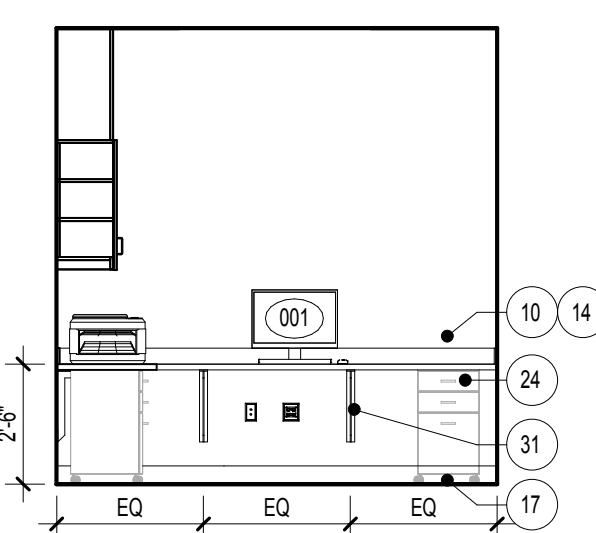
E3 OFFICE  
1/4" = 1'-0"



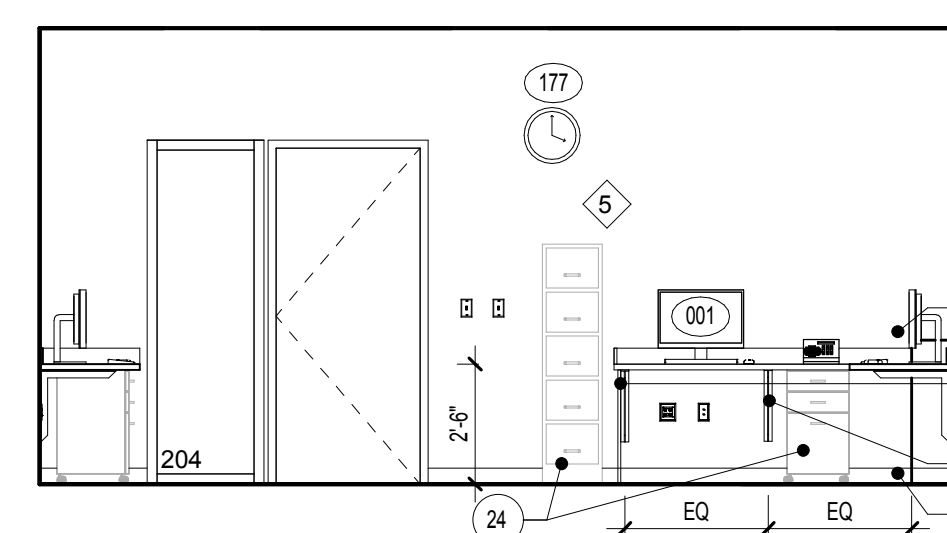
E4 PRIVATE TREATMENT ROOM 1-203  
1/4" = 1'-0"



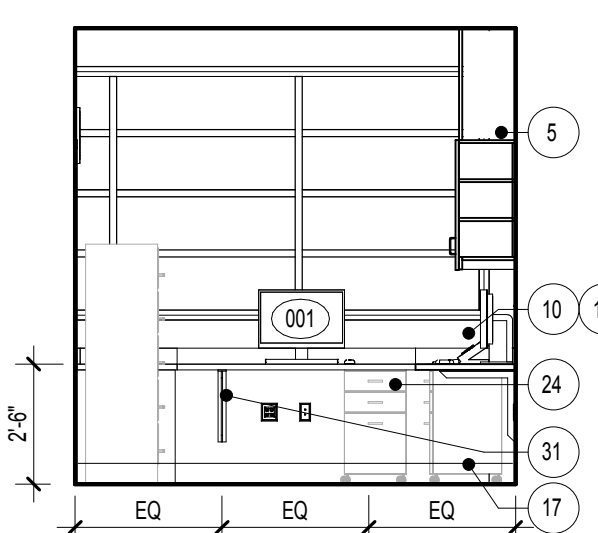
E6 PHYSICAL THERAPY CLINIC 1-202  
1/4" = 1'-0"



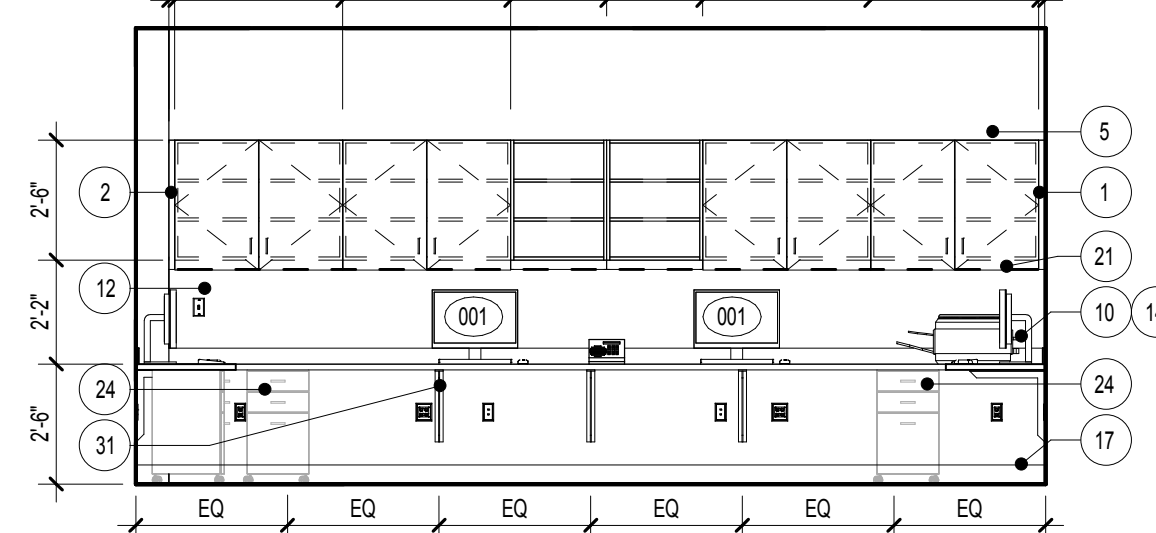
F1 OFFICE 1-204  
1/4" = 1'-0"



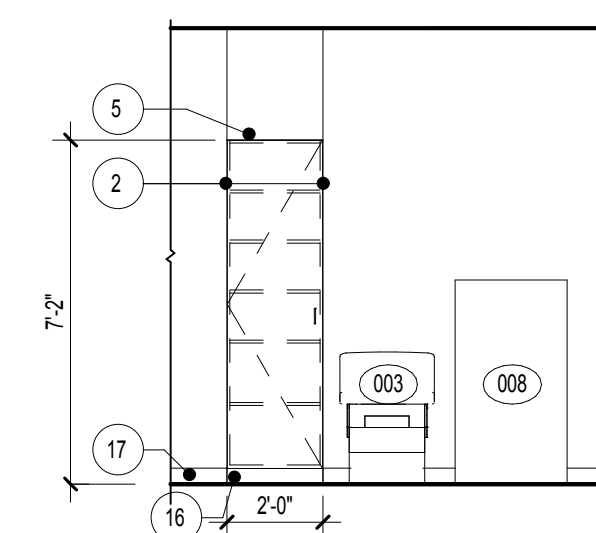
F2 OFFICE 1-204  
1/4" = 1'-0"



F3 OFFICE 1-204  
1/4" = 1'-0"



F4 OFFICE 1-204  
1/4" = 1'-0"



F6 PHYSICAL THERAPY CLINIC 1-202 - TYP BAY  
1/4" = 1'-0"

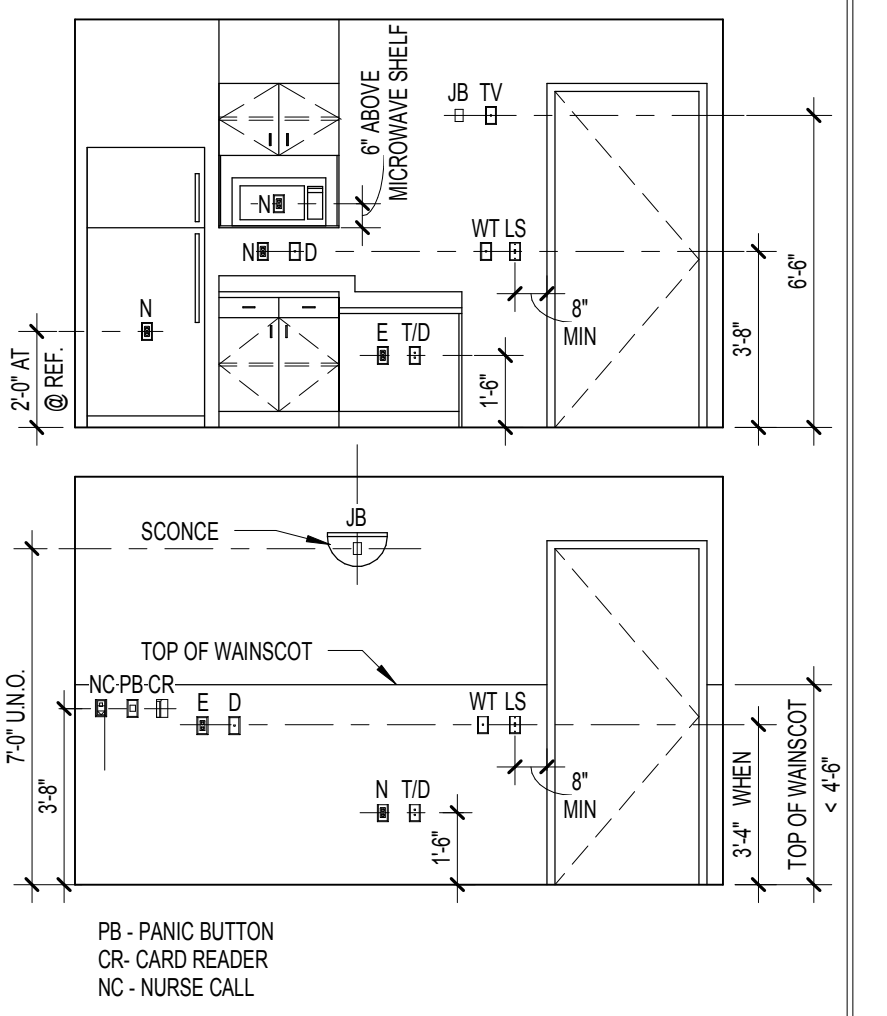
## ARCHITECTURAL GENERAL NOTES

- SEE SHEET AE704 FOR EQUIPMENT SCHEDULE.
- SEE SHEET AE701 FOR DOOR SCHEDULE.
- SEE SHEET AE701 FOR WINDOW SCHEDULE.
- SEE SHEET AE702 FOR TOILET ACCESSORY SCHEDULE.
- SEE SHEET AE704 FOR FINISH SCHEDULE.

## INTERIOR ELEVATION KEYNOTES

- PLASTIC LAMINATE FILLER PANEL.
- FINISH EXPOSED SIDE OF BASE / WALL CABINET WITH PLASTIC LAMINATE (TYP).
- PLASTIC LAMINATE END PANEL.
- 1" PLASTIC LAMINATE SUPPORT LEG.
- PLASTIC LAMINATE FASCIA PANEL ABOVE WALL CABINET, TYPICAL.
- PLASTIC WALL PROTECTION.
- CORNER GUARD.
- HANDRAIL MOUNT TOP AT 3'-0" A.F.F.
- CRASH RAIL MOUNT TOP AT 3'-0" A.F.F.
- SOLID SURFACE COUNTERTOP.
- SOLID SURFACE TRANSACTION SHELF.
- FABRIC WRAP TACK BOARD.
- WINDOW SILL TO BE CLEANED AND RETURNED TO ORIGINAL FINISH.
- 4" HIGH SOLID SURFACE BACK AND SIDE SPLASHES.
- LOCKER ROOM BENCH, TO BE RELOCATED FROM BUILDING 58.
- SCHEDULED BASE AT RECESSED TOE KICK.
- SCHEDULED BASE.
- CONTINUOUS WIRE MOLD, REFER TO ELECTRICAL DRAWINGS.
- CONTINUOUS "J" HANGER.
- SEGMENTED REMOVABLE ACCESS PANEL.
- TASK LIGHTING.
- WALL SCONCE.
- GYPSON WALLBOARD SOFFIT. COORDINATE HEIGHT WITH SOUND BOOTH SELECTED BY VA.
- STORAGE CABINET, NOT IN CONTRACT.
- BOOKCASE, NOT IN CONTRACT.
- METAL LOCKERS WITH SLOPED TOP, SEE SPECIFICATIONS.
- GYPSON WALLBOARD SOFFIT.
- MILLWORK TO BE LOCKABLE.
- LAMINATE AND TEMPERED GLASS.
- CUBICLE CURTAIN AND TRACK.
- METAL SUPPORT BRACKET.
- FURNITURE, N.I.C.
- BRICK INFILL TO MATCH EXISTING CONSTRUCTION.
- EXISTING ELECTRICAL PANEL TO REMAIN.
- ROBE HOOK RACK WITH 8 DOUBLE HOOKS.

## ELECTRICAL AND DATA OUTLETS TYPICAL MOUNTING HEIGHT



FULLY SPRINKLERED

NOTE: SEE SHEET AE-002 FOR DEDUCT ALTERNATES ISSUED FOR BID

## CONSULTANTS:

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**Architect**  
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**Fire Protection Consultant**  
HARRINGTON GROUP

7508 E. INDEPENDENCE  
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CHARLOTTE, NC 28227  
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**Cost Estimator**  
BRAY MOONEY CONSULTING

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Tel: (610) 872-3716

**Aquatic Consultant**  
ATLANTIC AQUATIC ENGINEERING

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Tel: (215) 786-0409

**Associate Architects**  
W. COOK ARCHITECTS

1251 ROMANSVILLE ROAD  
COATESVILLE, PA 19320  
Tel: (610) 383-4460

## PROJECT MANAGER:

**Bray Mooney Consulting**

Project Number  
3627

Scale  
As indicated

Drawing Title  
FIRST FLOOR ENLARGED PLAN - PHYSICAL AND KINESIOTHERAPY CLINICS

Approved: Project Director

Project Title  
RENOVATE BUILDING 69

Location  
1400 Black Horse Hill, Coatesville, PA

Date  
03-29-13

Checked  
TN

Drawn  
BG

VA Project Number  
542-CSI-203

Building Number  
69

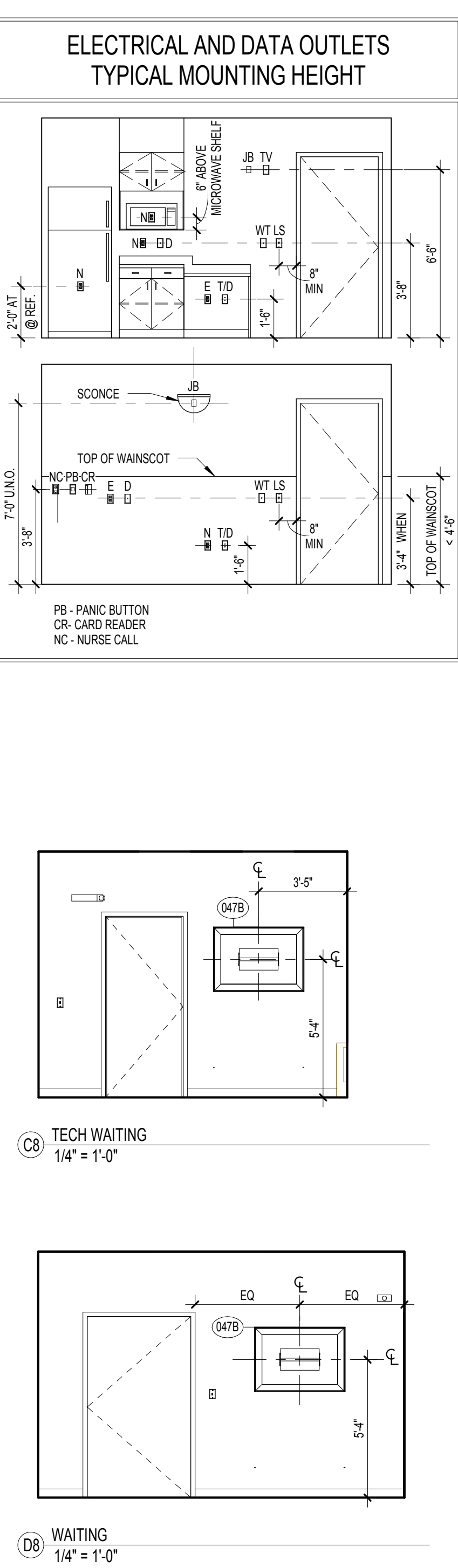
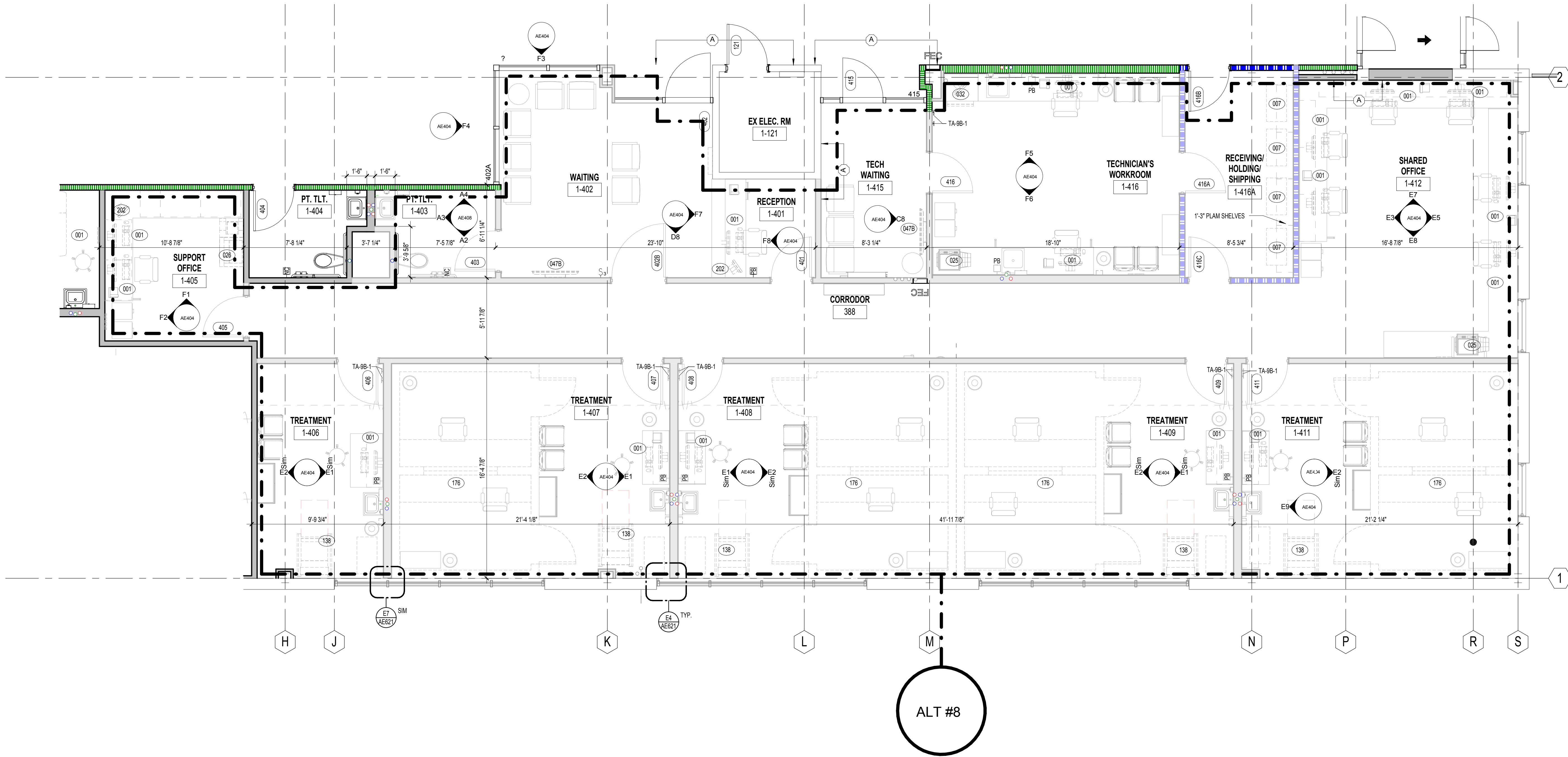
Drawing Number  
AE403

Dwg. 26 of 86

Office of  
Facilities  
Management

Department of  
Veterans Affairs

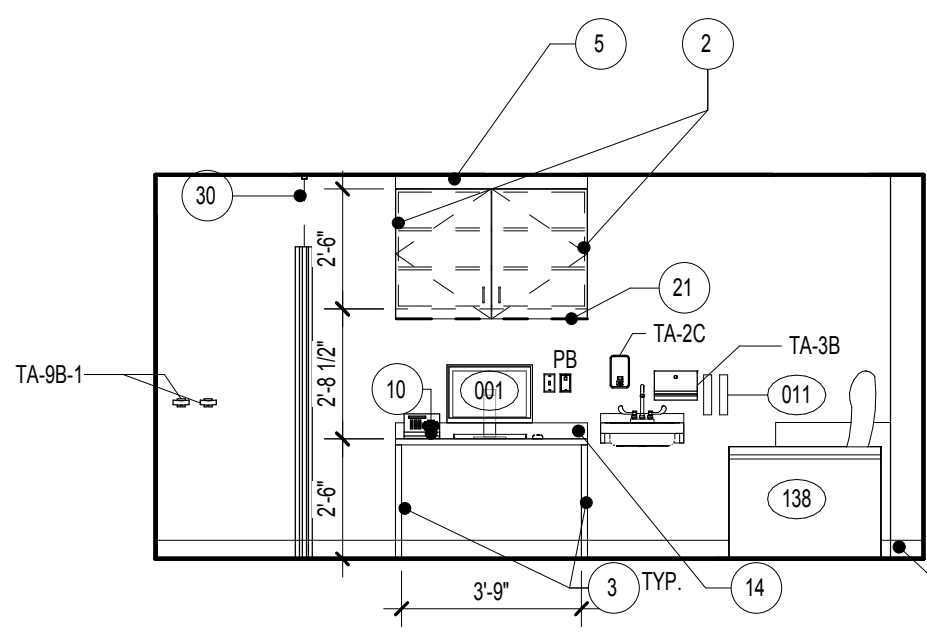




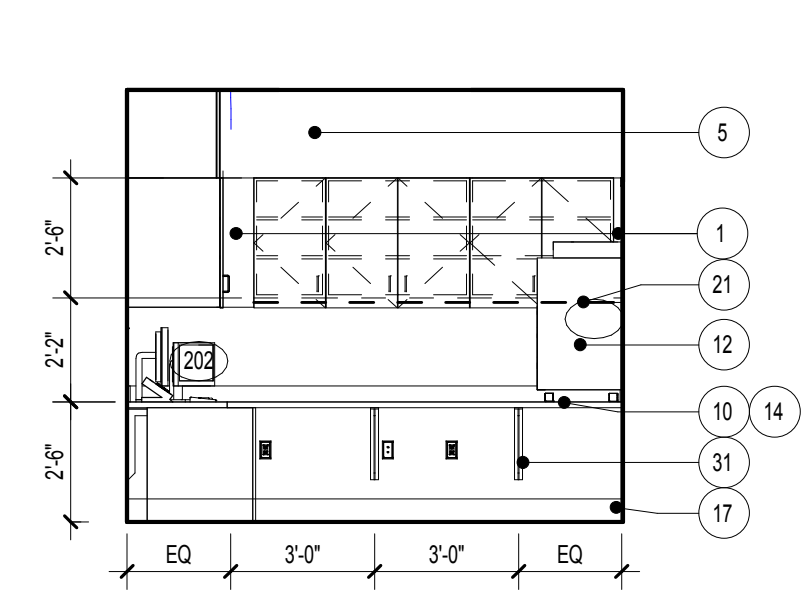
- ### ARCHITECTURAL GENERAL NOTES
- SEE SHEET AE04 FOR EQUIPMENT SCHEDULE.
  - SEE SHEET AE01 FOR DOOR SCHEDULE.
  - SEE SHEET AE01 FOR WINDOW SCHEDULE.
  - SEE SHEET AE02 FOR TOILET ACCESSORY SCHEDULE.
  - SEE SHEET AE04 FOR FINISH SCHEDULE.
- ### INTERIOR ELEVATION KEYNOTES
- PLASTIC LAMINATE FILLER PANEL.
  - FINISH EXPOSED SIDE OF BASE / WALL CABINET WITH PLASTIC LAMINATE (TYP).
  - PLASTIC LAMINATE END PANEL.
  - 1" PLASTIC LAMINATE SUPPORT LEG.
  - PLASTIC LAMINATE FASCIA PANEL ABOVE WALL CABINET, TYPICAL.
  - PLASTIC WALL PROTECTION CORNER GUARD.
  - HANDRAIL, MOUNT TOP AT 3'-0" A.F.F.
  - CRASH RAIL, MOUNT TOP AT 3'-0" A.F.F.
  - SOLID SURFACE COUNTERTOP.
  - SOLID SURFACE TRANSACTION SHELF.
  - FABRIC WRAP TACK BOARD.
  - WINDOW SILL TO BE CLEANED AND RETURNED TO ORIGINAL FINISH.
  - 4" HIGH SOLID SURFACE BACK AND SIDE SPLASHES.
  - LOCKER ROOM BENCH, TO BE RELOCATED FROM BUILDING 58.
  - SCHEDULED BASE AT RECESSED TOE KICK.
  - SCHEDULED BASE.
  - CONTINUOUS WIRE MOLD, REFER TO ELECTRICAL DRAWINGS.
  - CONTINUOUS 1" HANGER.
  - SEGMENTED REMOVABLE ACCESS PANEL.
  - TASK LIGHTING.
  - WALL SCIENCE.
  - GYPSUM WALLBOARD SOFFIT. COORDINATE HEIGHT WITH SOUND BOOTH SELECTED BY VA.
  - STORAGE CABINET, NOT IN CONTRACT.
  - BOOKCASE, NOT IN CONTRACT.
  - METAL LOCKERS WITH SLOPED TOP, SEE SPECIFICATIONS.
  - GYPSUM WALLBOARD SOFFIT.
  - MILLWORK TO BE LOCKABLE.
  - LAMINATE AND TEMPERED GLASS.
  - CUBICLE CURTAIN AND TRACK.
  - METAL SUPPORT BRACKET.
  - FURNITURE, N.I.C.
  - BRICK INFILL TO MATCH EXISTING CONSTRUCTION.
  - EXISTING ELECTRICAL PANEL, TO REMAIN.
  - ROBE HOOK RACK WITH 8 DOUBLE HOOKS.

NOTE: ALTERNATES SHOWN IN HALFTONE, ALL ELEMENTS INCLUDED IN BASE BID SHOWN IN BLACK.

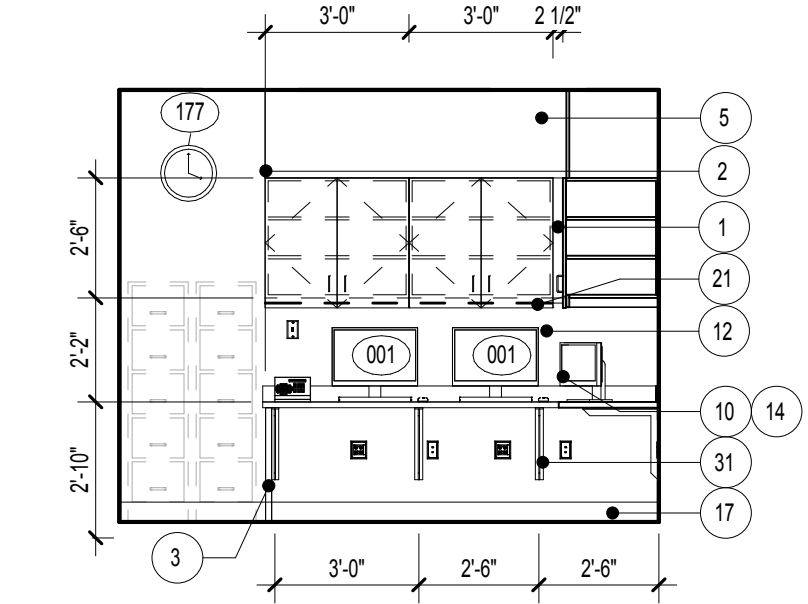
D1 ENLARGED FLOOR PLAN - AUDIOLOGY  
1/4" = 1'-0"



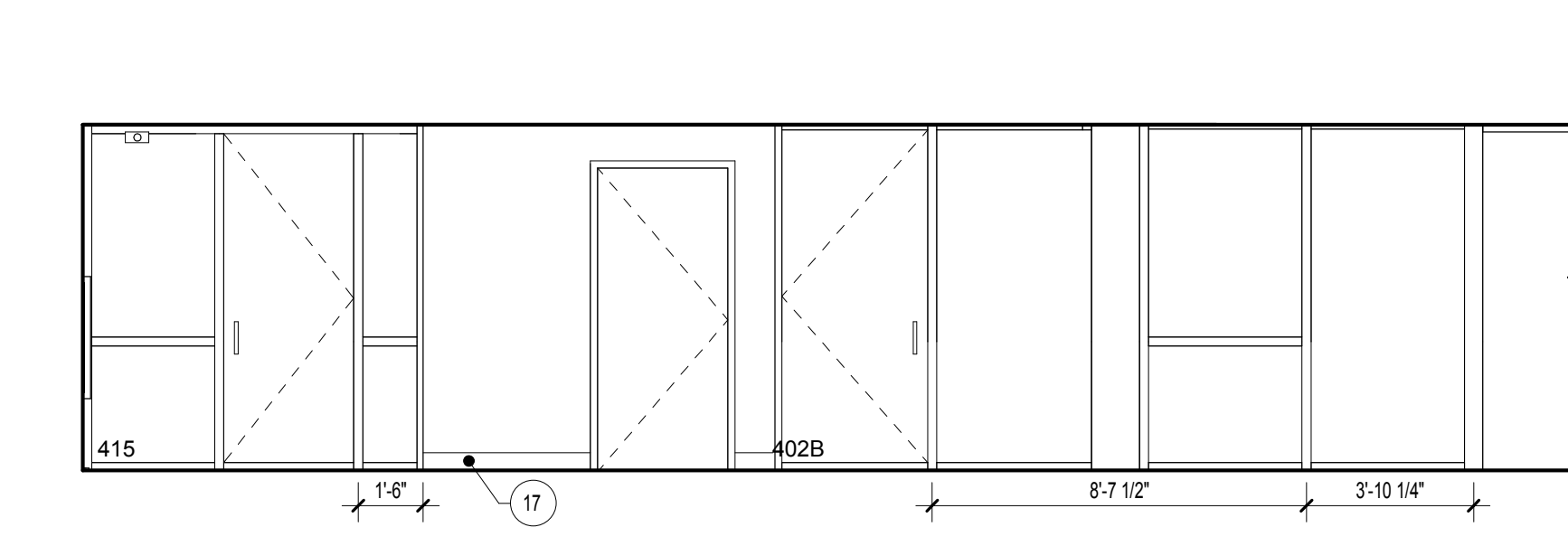
E1 TYP. TREATMENT ROOM  
1/4" = 1'-0"



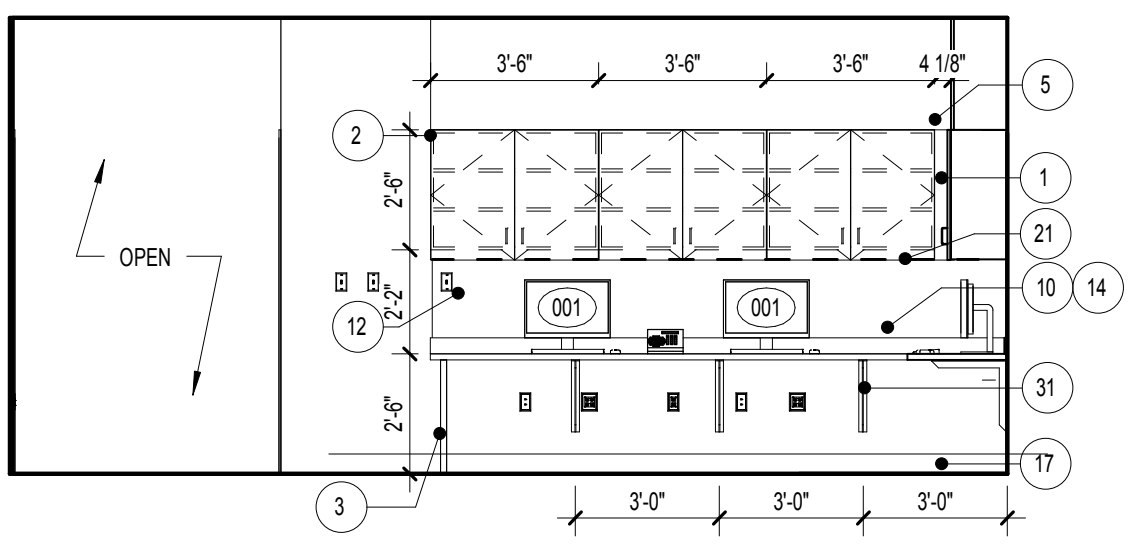
F1 SUPPORT OFFICE 1-405  
1/4" = 1'-0"



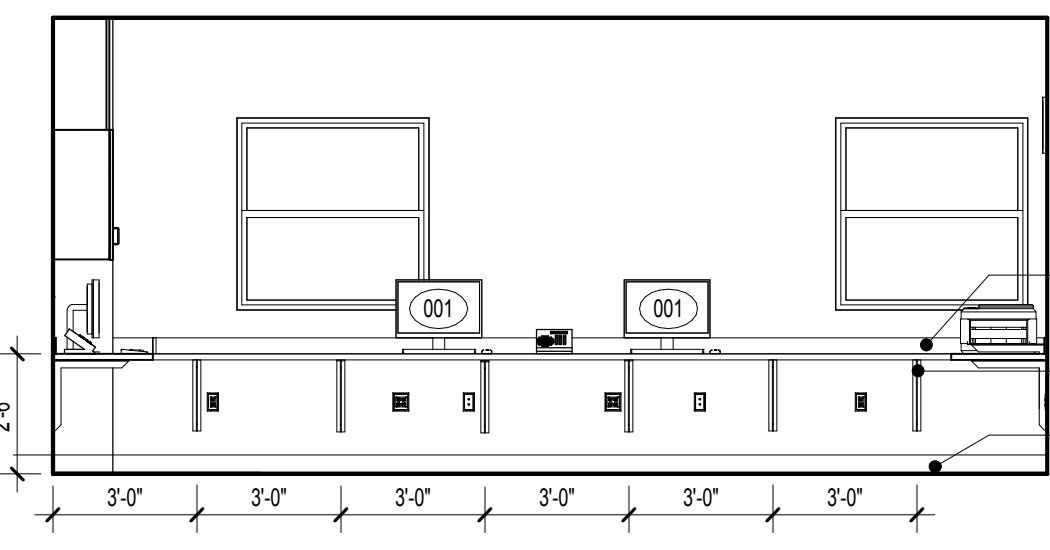
F2 SUPPORT OFFICE 1-405  
1/4" = 1'-0"



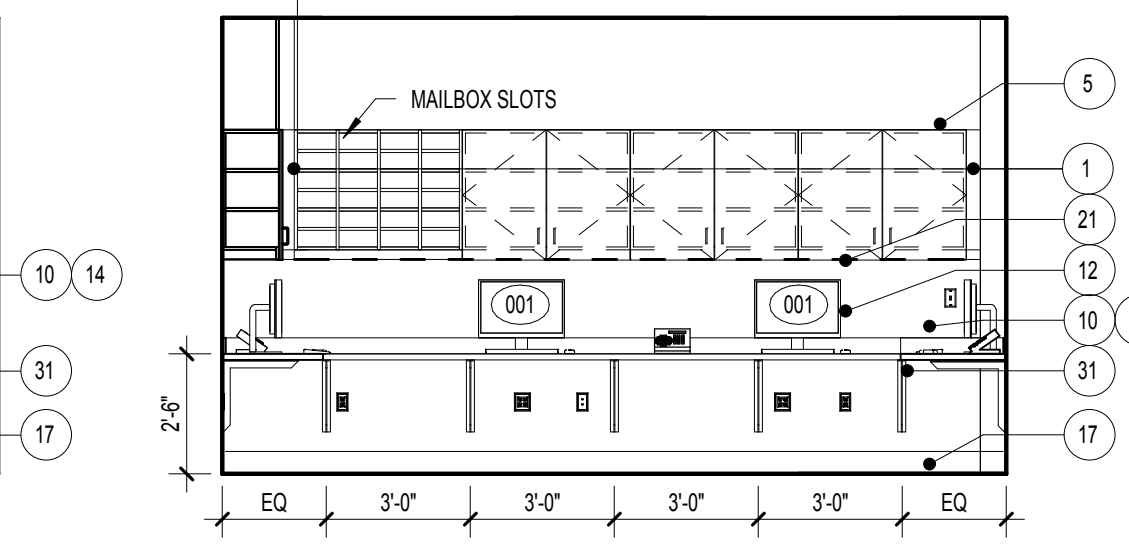
F3 WAITING  
1/4" = 1'-0"



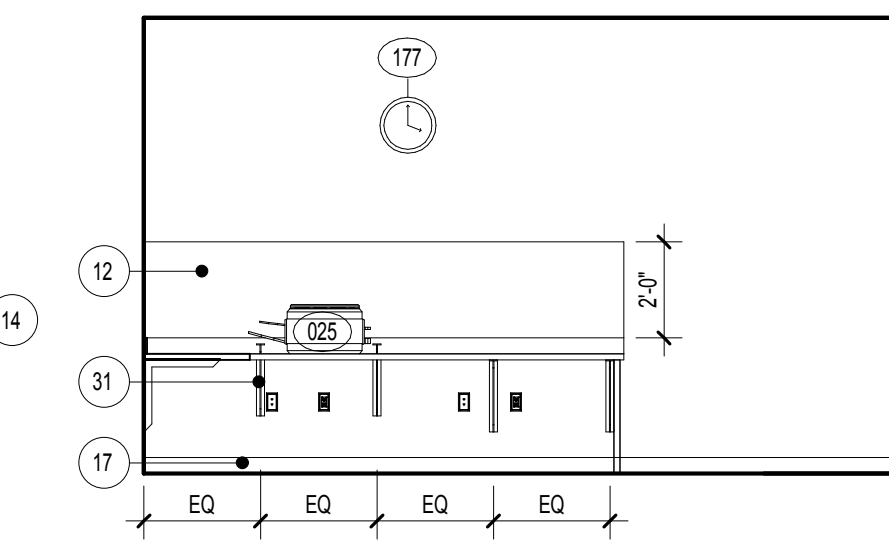
E3 SHARED OFFICE 1-412  
1/4" = 1'-0"



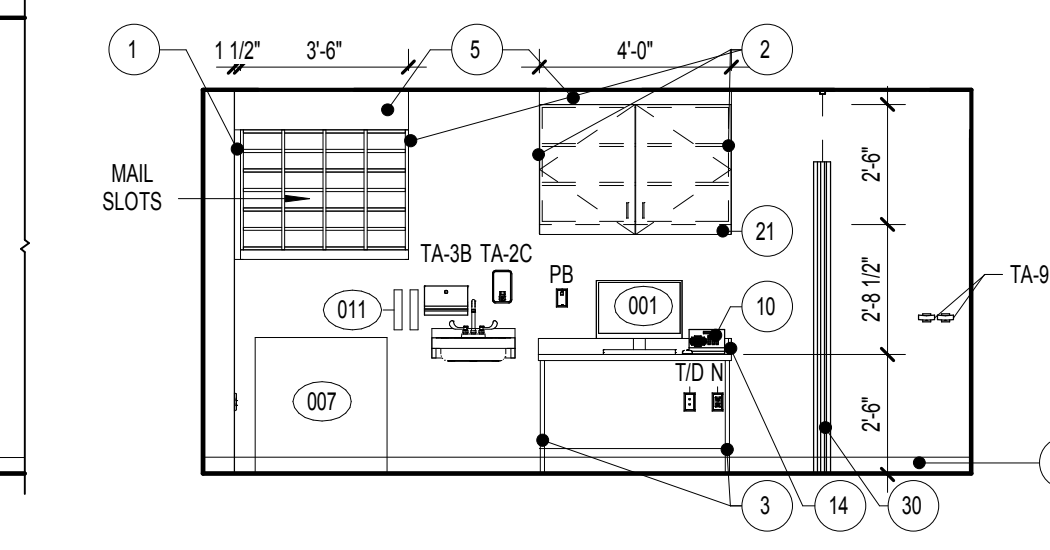
E5 SHARED OFFICE 1-412  
1/4" = 1'-0"



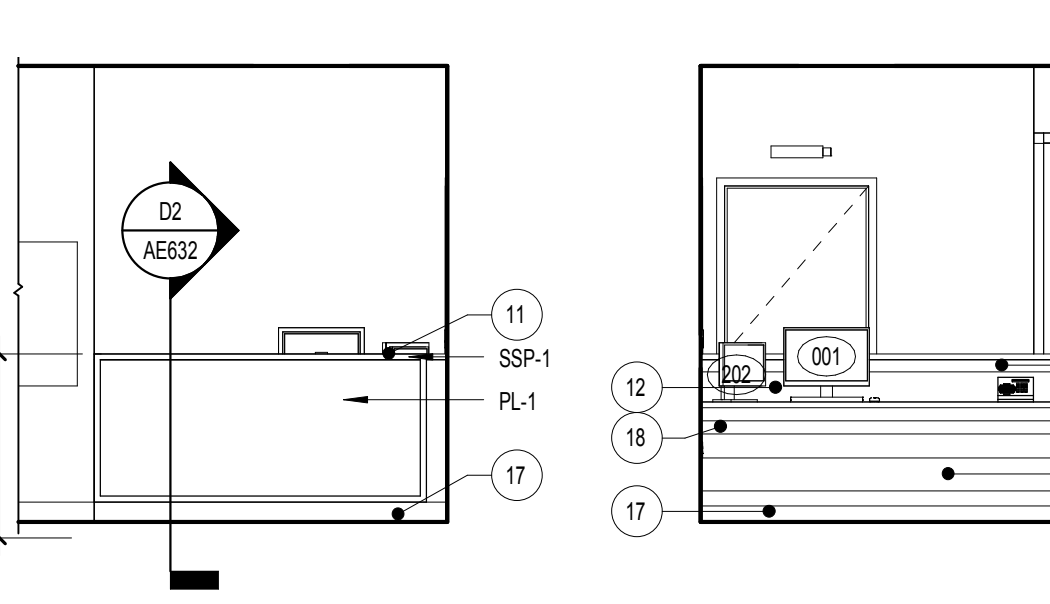
E7 SHARED OFFICE 1-412  
1/4" = 1'-0"



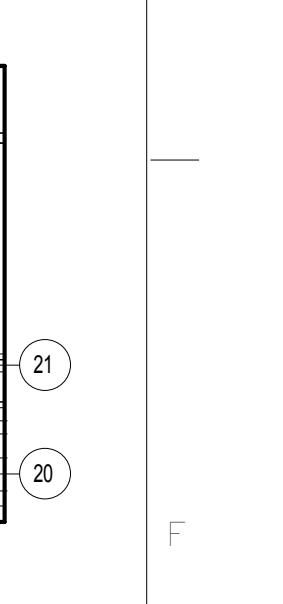
E8 SHARED OFFICE 1-412  
1/4" = 1'-0"



E9 TREATMENT 1-411  
1/4" = 1'-0"



F7 RECEPTION 1-401  
1/4" = 1'-0"



F8 RECEPTION 1-401  
1/4" = 1'-0"

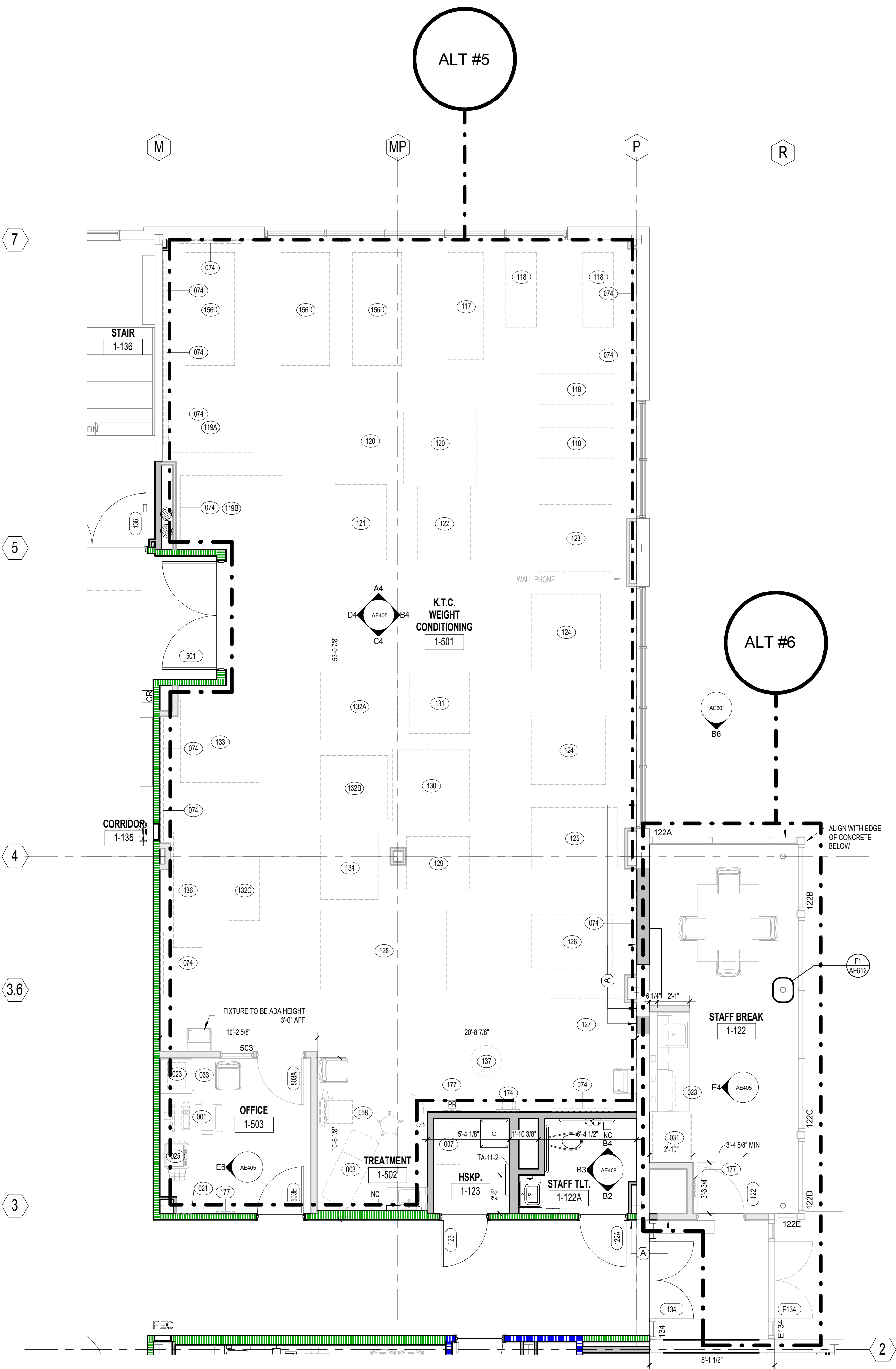
FULLY SPRINKLERED

NOTE: SEE SHEET AE-002 FOR DEDUCT ALTERNATES ISSUED FOR BID

CONSULTANTS:										PROJECT MANAGER:		Project Number	3627	Scale	As indicated	Drawing Title		Project Title		VA Project Number	Office of Facilities Management						
Project Manager		Architect		Structural Engineer		MEP/FP Engineer		Civil Engineer		Fire Protection Consultant		Cost Estimator		Aquatic Consultant		Associate Architects		RENOVATE BUILDING 69		542-CSI-203							
BRAY MOONEY CONSULTING		ARRAY HEALTHCARE FACILITIES SOLUTIONS		WZG, STRUCTURAL CONSULTING ENGINEERS		APOGEE CONSULTING GROUP		GUIDON DESIGN		HARRINGTON GROUP		BRAY MOONEY CONSULTING		ATLANTIC AQUATIC ENGINEERING		W. COOK ARCHITECTS		Building Number		69							
410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716		2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA 19406 Tel: (610) 275-5599		P.O. BOX 24 40 LITTLE ROAD ZIEGLERVILLE, PA 19422 Tel: (610) 287-3194		7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC 27606 Tel: (919) 858-7420		2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 600-6388		7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC 28277 Tel: (704) 531-9277		410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716		1823 DEEP RUN ROAD PIPERSVILLE, PA 18947 Tel: (215) 786-0409		1251 ROMANSVILLE ROAD COATESVILLE, PA 19320 Tel: (610) 383-4460		Drawing Number		AE404							
Revisions		Date								Approved: Project Director						Location		1400 Black Horse Hill, Coatesville, PA		Dwg. 27 of 86							
										Bray Mooney Consulting								Date		03-29-13		Checked		TN	Drawn		BG

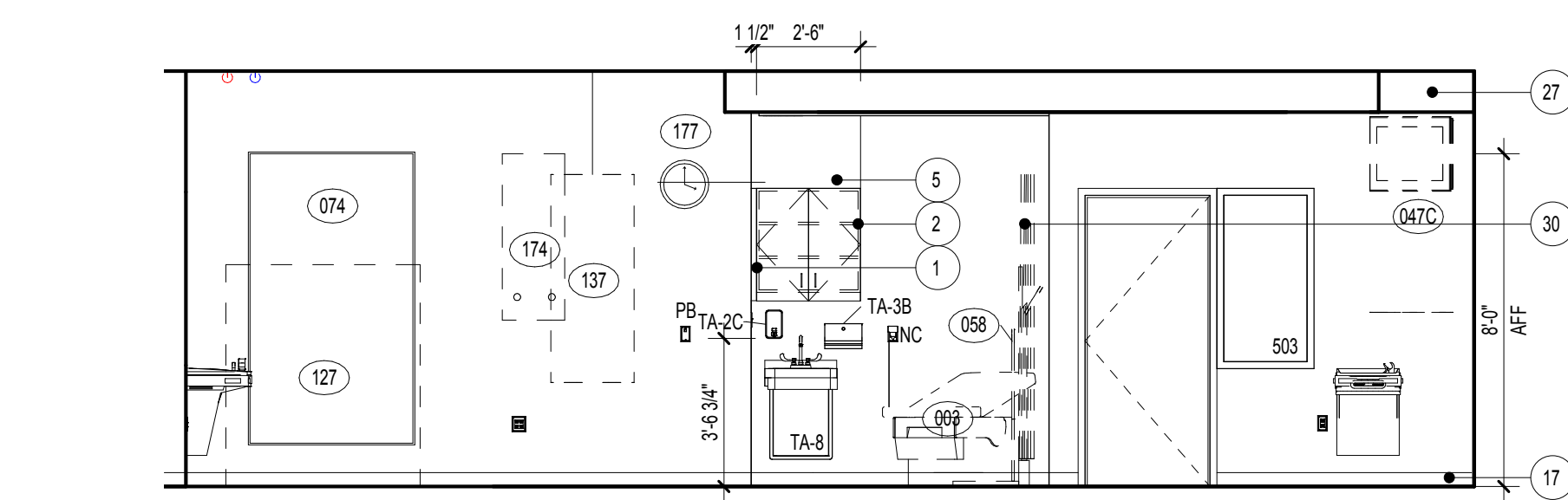
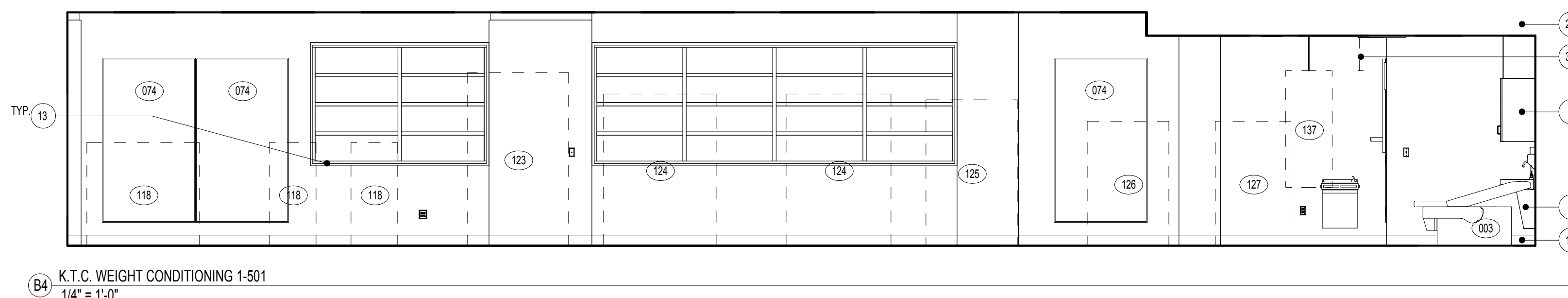
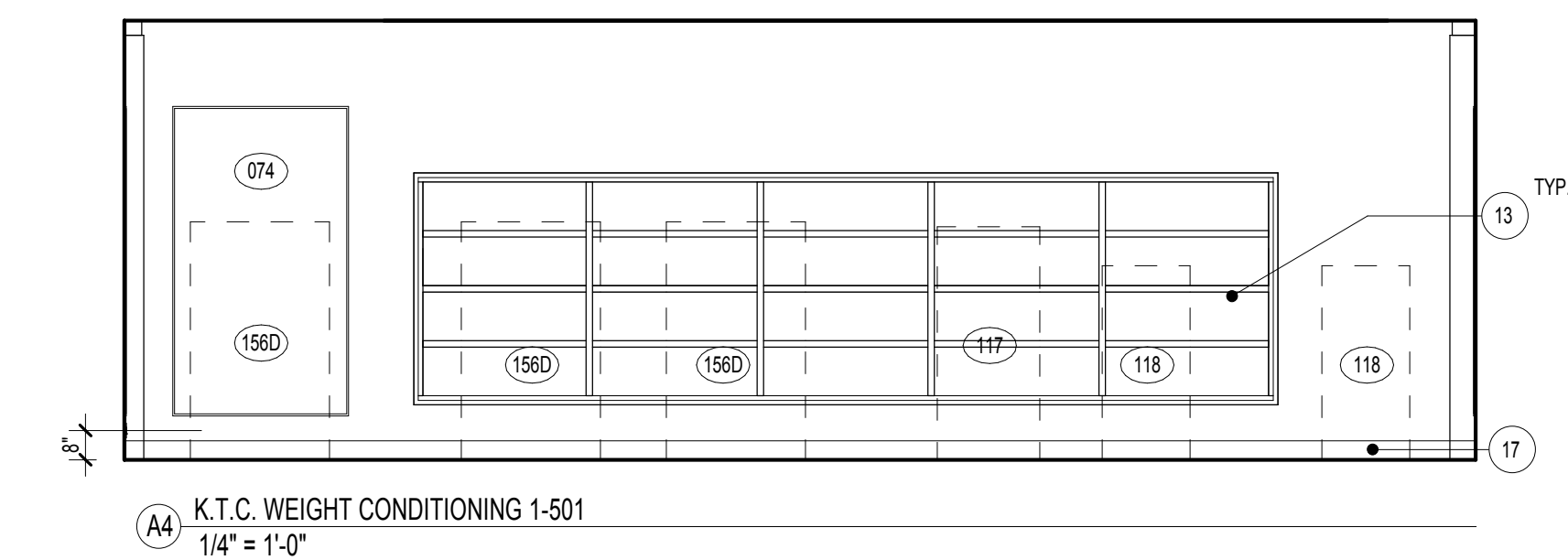


three inches = one foot  
one and one half inches = one foot  
one inch = one foot  
three quarters inch = one foot  
one half inch = one foot  
three eighths inch = one foot  
one quarter inch = one foot  
one eighth inch = one foot

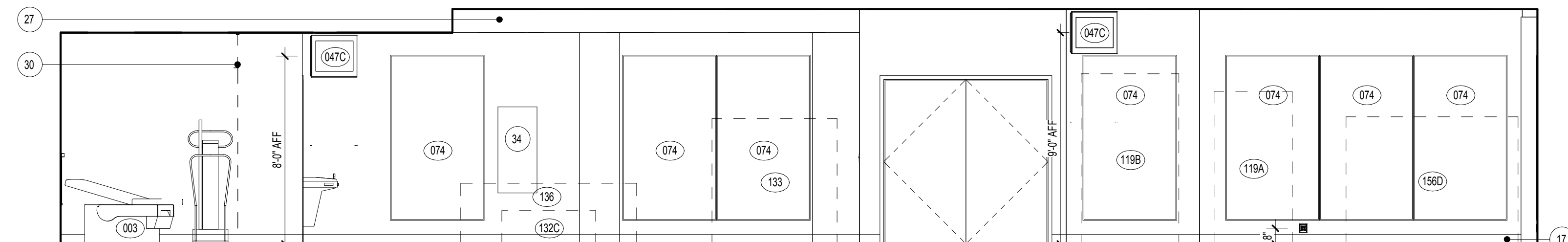


NOTE: ALTERNATES SHOWN IN HALFTONE, ALL ELEMENTS INCLUDED IN BASE BID SHOWN IN BLACK.

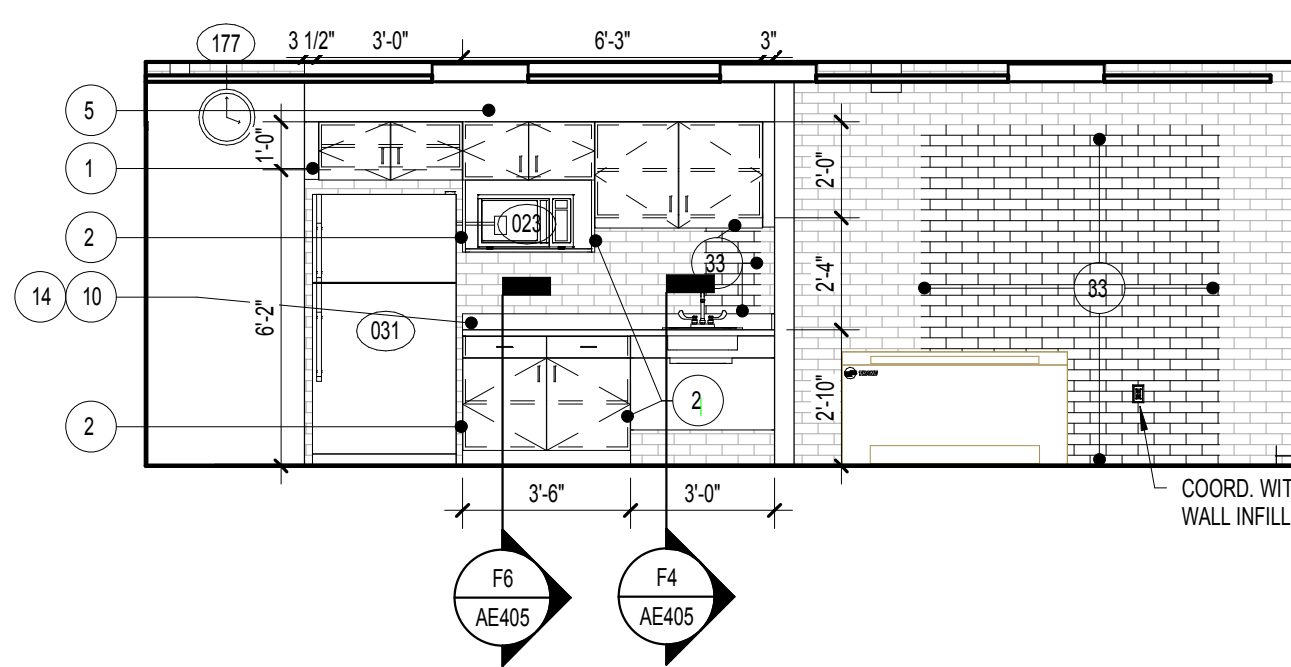
E1 ENLARGED FLOOR PLAN - WEIGHT TRAINING CLINIC  
1/4" = 1'-0"



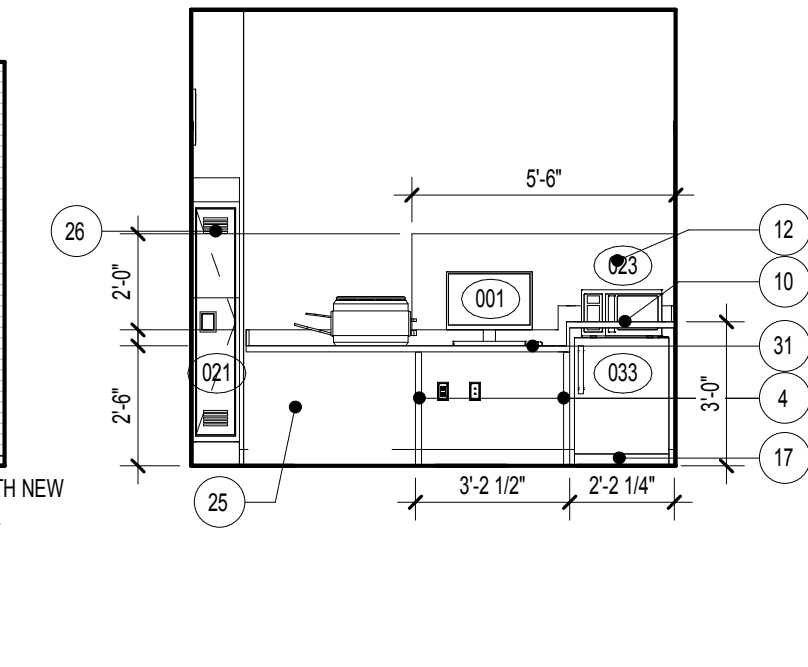
C4 K.T.C. WEIGHT CONDITIONING 1-501  
1/4" = 1'-0"



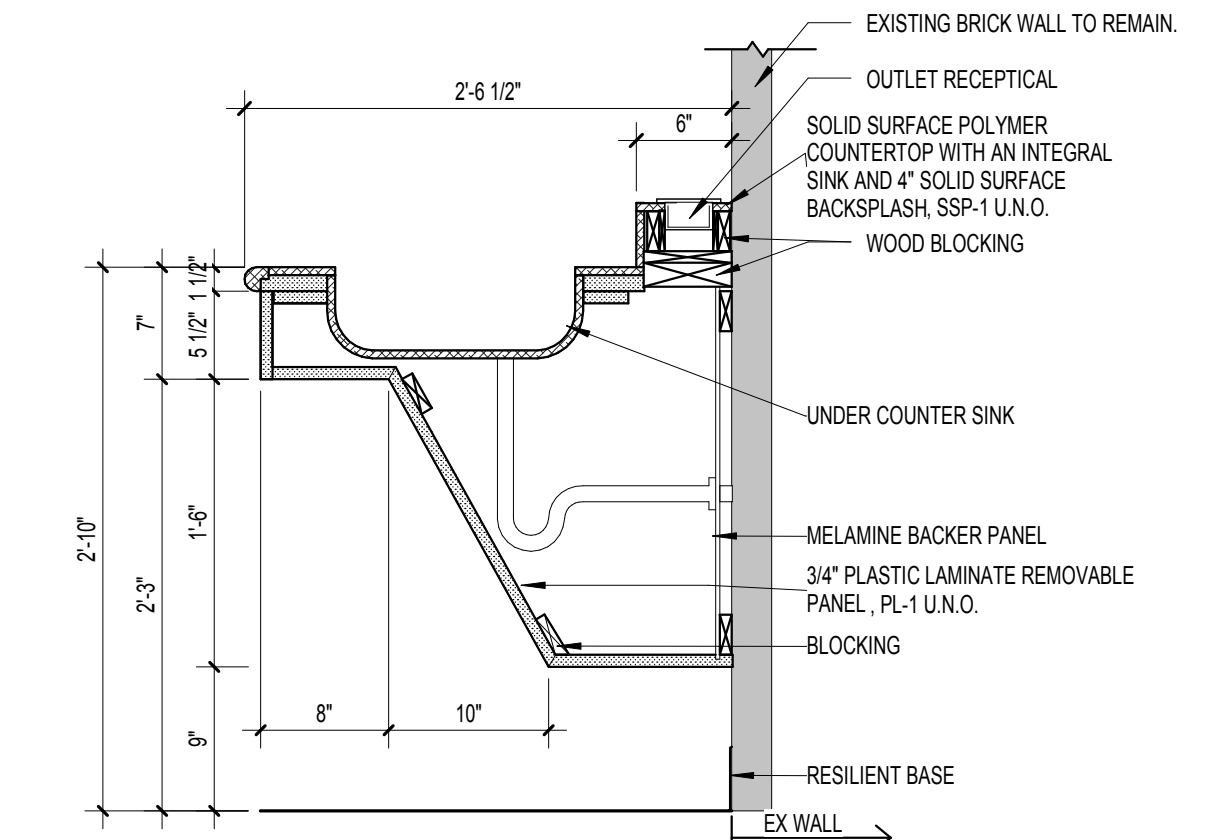
D4 K.T.C. WEIGHT CONDITIONING 1-501  
1/4" = 1'-0"



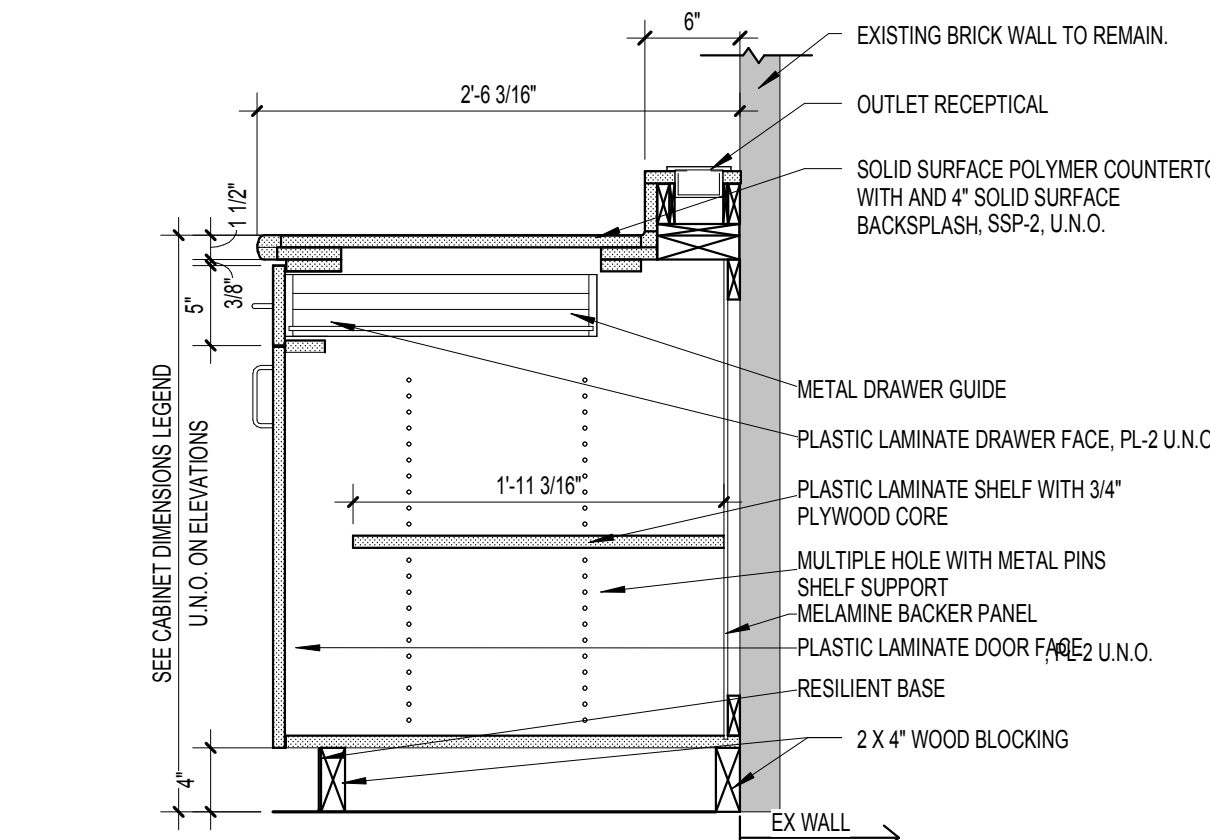
E4 STAFF BREAK 1-122  
1/4" = 1'-0"



F6 OFFICE 1-503  
1/4" = 1'-0"



G4 SECTION @ ADA BASE CABINET - STAFF BREAK  
1" = 1'-0"



H6 SECTION @ TYPICAL BASE CABINET - STAFF BREAK  
1" = 1'-0"

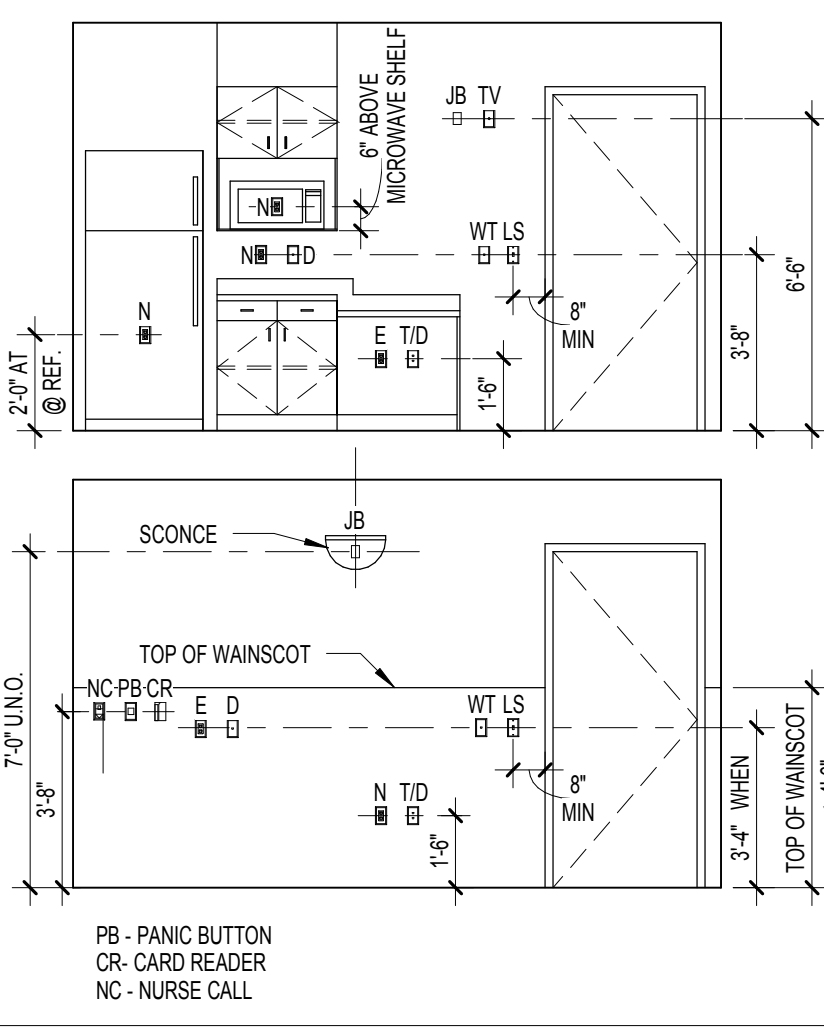
### ARCHITECTURAL GENERAL NOTES

1. SEE SHEET AE704 FOR EQUIPMENT SCHEDULE.
2. SEE SHEET AE701 FOR DOOR SCHEDULE.
3. SEE SHEET AE701 FOR WINDOW SCHEDULE.
4. SEE SHEET AE702 FOR TOILET ACCESSORY SCHEDULE.
5. SEE SHEET AE704 FOR FINISH SCHEDULE.

### INTERIOR ELEVATION KEYNOTES

1. PLASTIC LAMINATE FILLER PANEL.
2. FINISH EXPOSED SIDE OF BASE / WALL CABINET WITH PLASTIC LAMINATE (TYP).
3. PLASTIC LAMINATE END PANEL.
4. 1" PLASTIC LAMINATE SUPPORT LEG.
5. PLASTIC LAMINATE FASCIA PANEL ABOVE WALL CABINET, TYPICAL.
6. PLASTIC WALL PROTECTION.
7. CORNER GUARD.
8. HANDRAIL, MOUNT TOP AT 3'-0" A.F.F.
9. CRASH RAIL, MOUNT TOP AT 3'-0" A.F.F.
10. SOLID SURFACE COUNTERTOP.
11. SOLID SURFACE TRANSACTION SHELF.
12. FABRIC WRAP TACK BOARD.
13. WINDOW SILL TO BE CLEANED AND RETURNED TO ORIGINAL FINISH.
14. 4" HIGH SOLID SURFACE BACK AND SIDE SPLASHES.
15. LOCKER ROOM BENCH, TO BE RELOCATED FROM BUILDING 58.
16. SCHEDULED BASE AT RECESSED TOE KICK.
17. SCHEDULED BASE.
18. CONTINUOUS WIRE MOLD, REFER TO ELECTRICAL DRAWINGS.
19. CONTINUOUS "J" HANGER.
20. SEGMENTED REMOVABLE ACCESS PANEL.
21. TASK LIGHTING.
22. WALL SCONCE.
23. GYPSUM WALLBOARD SOFFIT. COORDINATE HEIGHT WITH SOUND BOOTH SELECTED BY VA.
24. STORAGE CABINET, NOT IN CONTRACT.
25. BOOKCASE, NOT IN CONTRACT.
26. METAL LOCKERS WITH SLOPED TOP, SEE SPECIFICATIONS.
27. GYPSUM WALLBOARD SOFFIT.
28. MILLWORK TO BE LOCKABLE.
29. LAMINATE AND TEMPERED GLASS.
30. CUBICLE CURTAIN AND TRACK.
31. METAL SUPPORT BRACKET.
32. FURNITURE, N.I.C.
33. BRICK INFILL TO MATCH EXISTING CONSTRUCTION.
34. EXISTING ELECTRICAL PANEL, TO REMAIN.
35. ROBE HOOK RACK WITH 8 DOUBLE HOOKS.

### ELECTRICAL AND DATA OUTLETS TYPICAL MOUNTING HEIGHT



NOTE: SEE SHEET AE-002 FOR DEDUCT ALTERNATES ISSUED FOR BID

### CONSULTANTS:

<b>Project Manager</b> BRAY MOONEY CONSULTING 410 E. 21 STREET CHESTER, PA. 19013 Tel: (610) 872-3716	<b>Architect</b> ARRAY HEALTHCARE FACILITIES SOLUTIONS 2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA. 19406 Tel: (610) 279-5599	<b>Structural Engineer</b> WZG, STRUCTURAL CONSULTING ENGINEERS P.O. BOX 24 40 LITTLE ROAD ZIEGLERVILLE, PA. 19482 Tel: (610) 287-3194	<b>MEP/FP Engineer</b> APOGEE CONSULTING GROUP 7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC. 27606 Tel: (919) 858-7420	<b>Civil Engineer</b> GUIDON DESIGN 2453 N. DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 850-6388	<b>Fire Protection Consultant</b> HARRINGTON GROUP 7508 E. INDEPENDENCE BLVD., SUITE 118 CHARLOTTE, NC. 28227 Tel: (704) 531-9077	<b>Cost Estimator</b> BRAY MOONEY CONSULTING 410 E. 21 STREET CHESTER, PA. 19013 Tel: (610) 872-3716	<b>Aquatic Consultant</b> ATLANTIC AQUATIC ENGINEERING 1823 DEEP RUN ROAD PIPERSVILLE, PA. 18947 Tel: (215) 786-0409	<b>Associate Architects</b> W. COOK ARCHITECTS 1251 ROMANSVILLE ROAD COATESVILLE, PA. 19320 Tel: (610) 383-4460
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### PROJECT MANAGER:



Project Number 3627  
Scale As indicated

Drawing Title  
FIRST FLOOR ENLARGED PLAN - WEIGHT TRAINING CLINIC

Approved: Project Director

Project Title  
RENOVATE BUILDING 69

Location  
1400 Black Horse Hill, Coatesville, PA

Date 03-29-13  
Checked TN  
Drawn BG

VA Project Number  
542-CSJ-203

Building Number  
69

Drawing Number  
AE405

Dwg. 28 of 86

Office of  
Facilities  
Management











D



1. SEE SHEET AE704 FOR EQUIPMENT SCHEDULE.
2. SEE SHEET AE701 FOR DOOR SCHEDULE.
3. SEE SHEET AE701 FOR WINDOW SCHEDULE.
4. SEE SHEET AE702 FOR TOILET ACCESSORY SCHEDULE.
5. SEE SHEET AE704 FOR FINISH SCHEDULE.

1. ALL TOILET PARTITIONS TO BE WALL HUNG WITH CEILING MOUNTED SUPPORTS

1. ALL TOILET PARTITIONS TO BE WALL HUNG WITH CEILING MOUNTED SUPPORTS

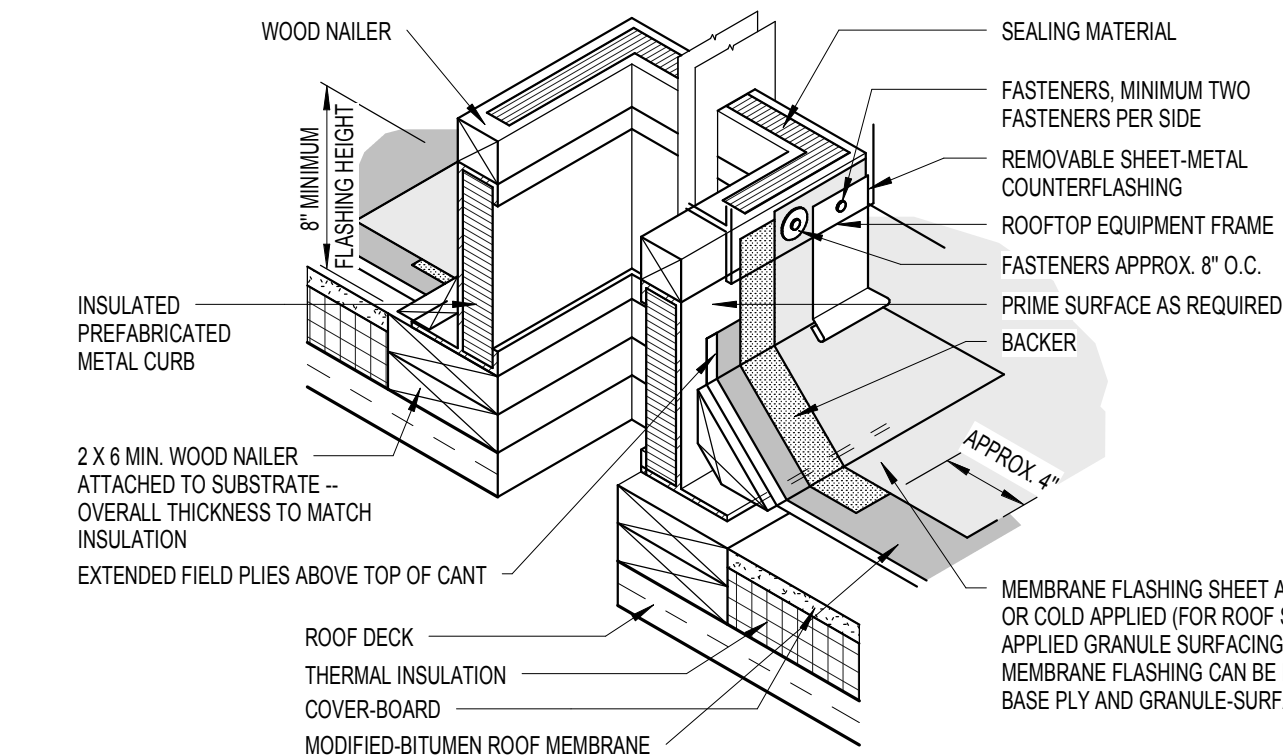
- 1 PLASTIC LAMINATE FILLER PANEL.
- 2 FINISH EXPOSED SIDE OF BASE / WALL CABINET WITH PLASTIC LAMINATE (TYP)
- 3 PLASTIC LAMINATE END PANEL.
- 4 1" PLASTIC LAMINATE SUPPORT LEG.
- 5 PLASTIC LAMINATE FASCIA PANEL ABOVE WALL CABINET, TYPICAL.
- 6 PLASTIC WALL PROTECTION.
- 7 CORNER GUARD.
- 8 HANDRAIL MOUNT TOP AT 3'-0" A.F.F.
- 9 CRASH RAIL MOUNT TOP AT 3'-0" A.F.F.
- 10 SOLID SURFACE COUNTERTOP.
- 11 SOLID SURFACE TRANSACTION SHELF.
- 12 FABRIC WRAP TACK BOARD.
- 13 WINDOW SILL TO BE CLEANED AND RETURNED TO ORIGINAL FINISH
- 14 4" HIGH SOLID SURFACE BACK AND SIDE SPLASHES.
- 15 LOCKER ROOM BENCH, TO BE RELOCATED FROM BUILDING 58.
- 16 SCHEDULED BASE AT RECESSED TOE KICK.
- 17 SCHEDULED BASE
- 18 CONTINUOUS WIRE MOLD, REFER TO ELECTRICAL DRAWINGS.
- 19 CONTINUOUS "J" HANGER.
- 20 SEGMENTED REMOVABLE ACCESS PANEL.
- 21 TASK LIGHTING
- 22 WALL SCONCE
- 23 GYPSUM WALLBOARD SOFFIT. COORDINATE HEIGHT WITH SOUND BOOT SELECTED BY VA.
- 24 STORAGE CABINET, NOT IN CONTRACT.
- 25 BOOKCASE, NOT IN CONTRACT.
- 26 METAL LOCKERS WITH SLOPED TOP. SEE SPECIFICATIONS.
- 27 GYPSUM WALLBOARD SOFFIT
- 28 MILLWORK TO BE LOCKABLE
- 29 LAMINATE AND TEMPERED GLASS
- 30 CUBICLE CURTAIN AND TRACK
- 31 METAL SUPPORT BRACKET
- 32 FURNITURE, N.I.C.
- 33 BRICK INFILL TO MATCH EXISTING CONSTRUCTION.
- 34 EXISTING ELECTRICAL PANEL, TO REMAIN.
- 35 ROBE HOOK RACK WITH 8 DOUBLE HOOKS.

[illegible]

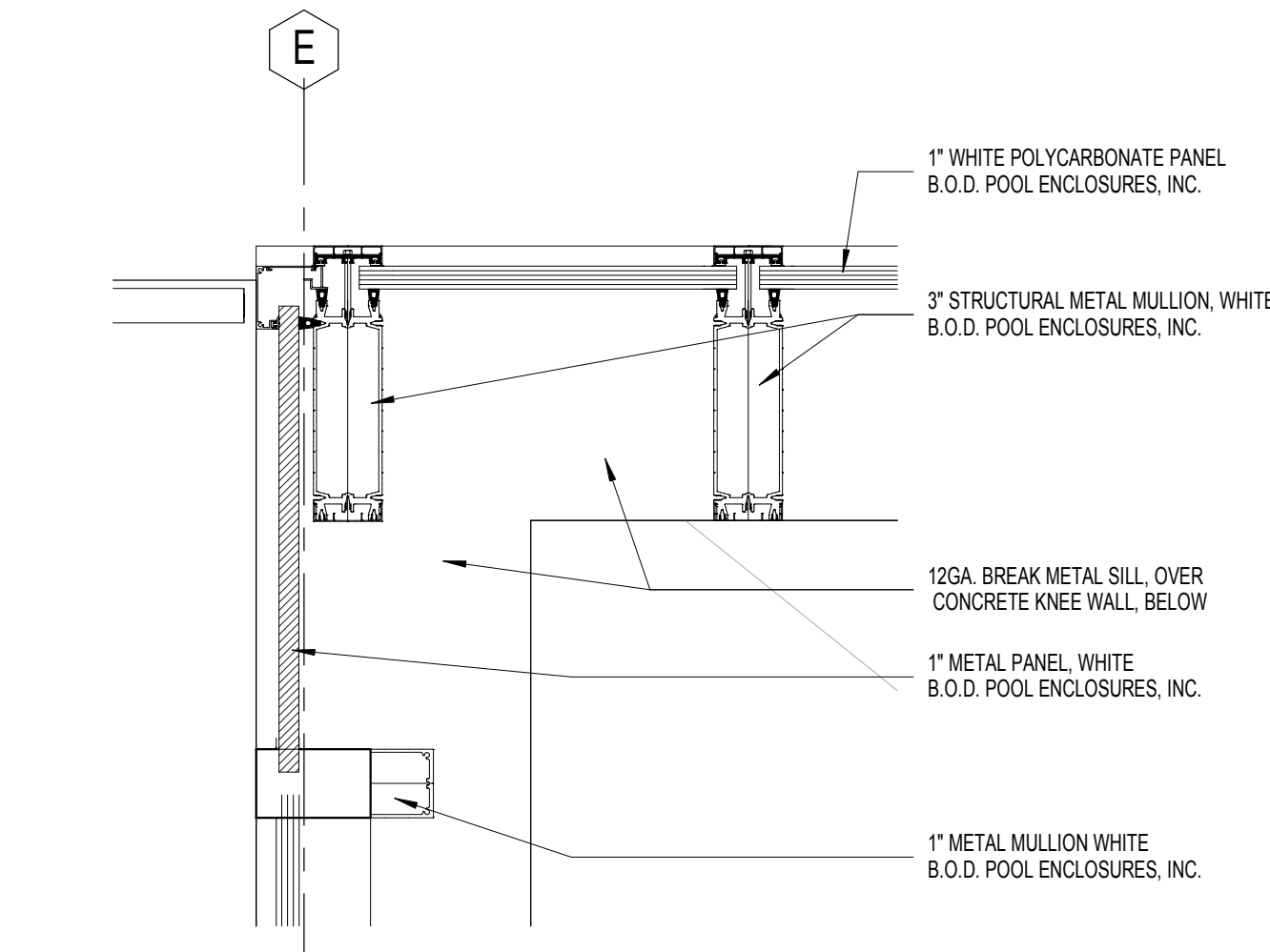
**NOTES:**

1. ADA REQUIRES THAT MOUNTING HEIGHTS FOR BARRIER FREE DESIGN BE SO LOCATED THAT THE OPERATIVE PORTION (I.E. PUSH KNOB, TOWELS SLOT) BE NO HIGHER THAN 40" FROM FINISHED FLOOR, GRAB BARS BE BETWEEN 33" AND 36" AND COIN SLOTS BE NO HIGHER THAN 48" FROM FINISHED FLOOR.
2. TOILET ACCESSORIES DESIGN VARIES BY MANUFACTURER. SEE MANUFACTURER MOUNTING HEIGHT REQUIREMENTS FOR ROUGH-INS DIMENSIONS AND LOCATION.

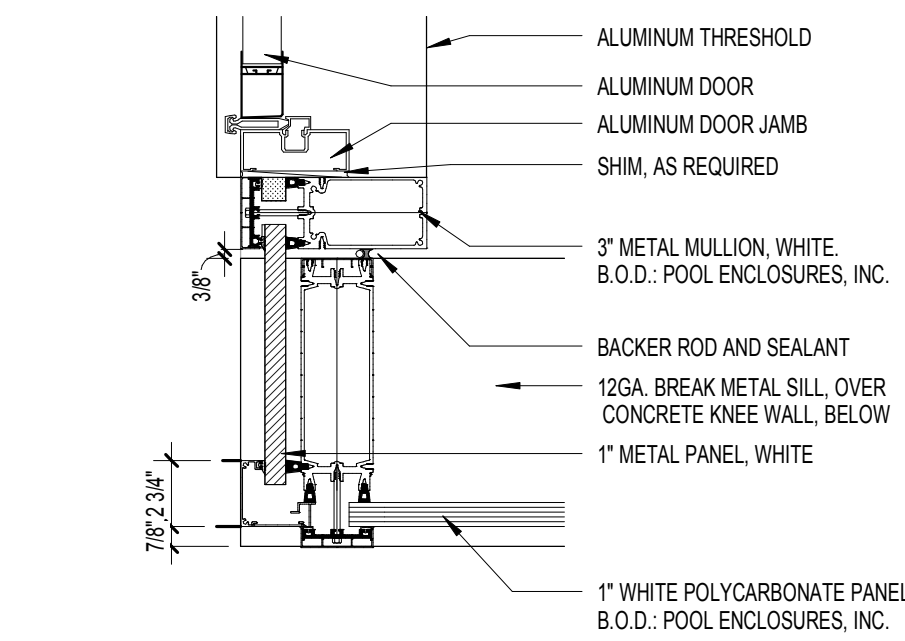




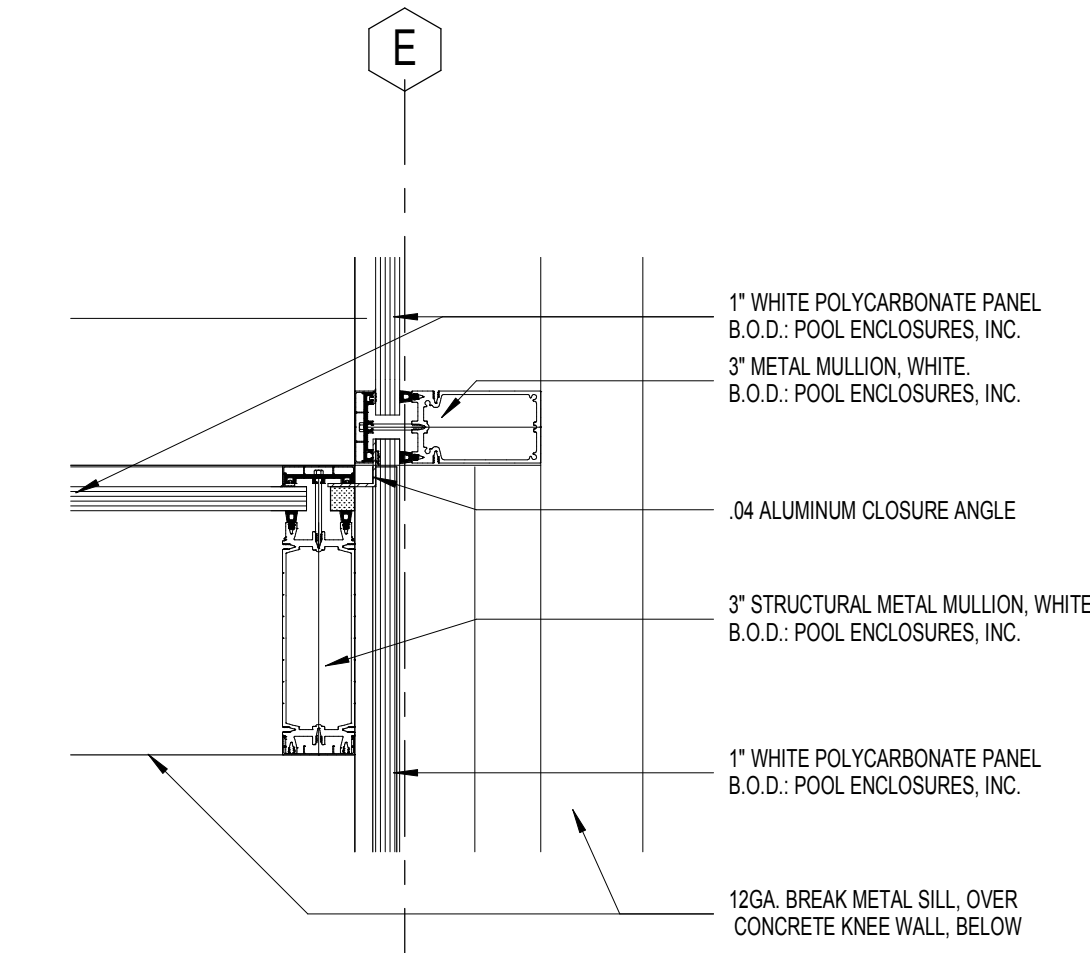
B1 MOP OR COLD-APPLIED FLASHING AT INSULATED PREFABRICATED METAL CURB  
1:6



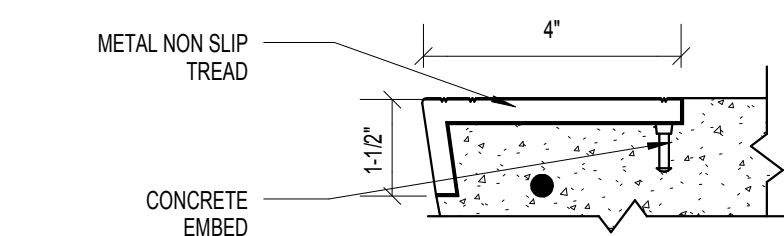
B3 DETAIL @ POOL ENCLOSURE CORNER  
1 1/2\"/>



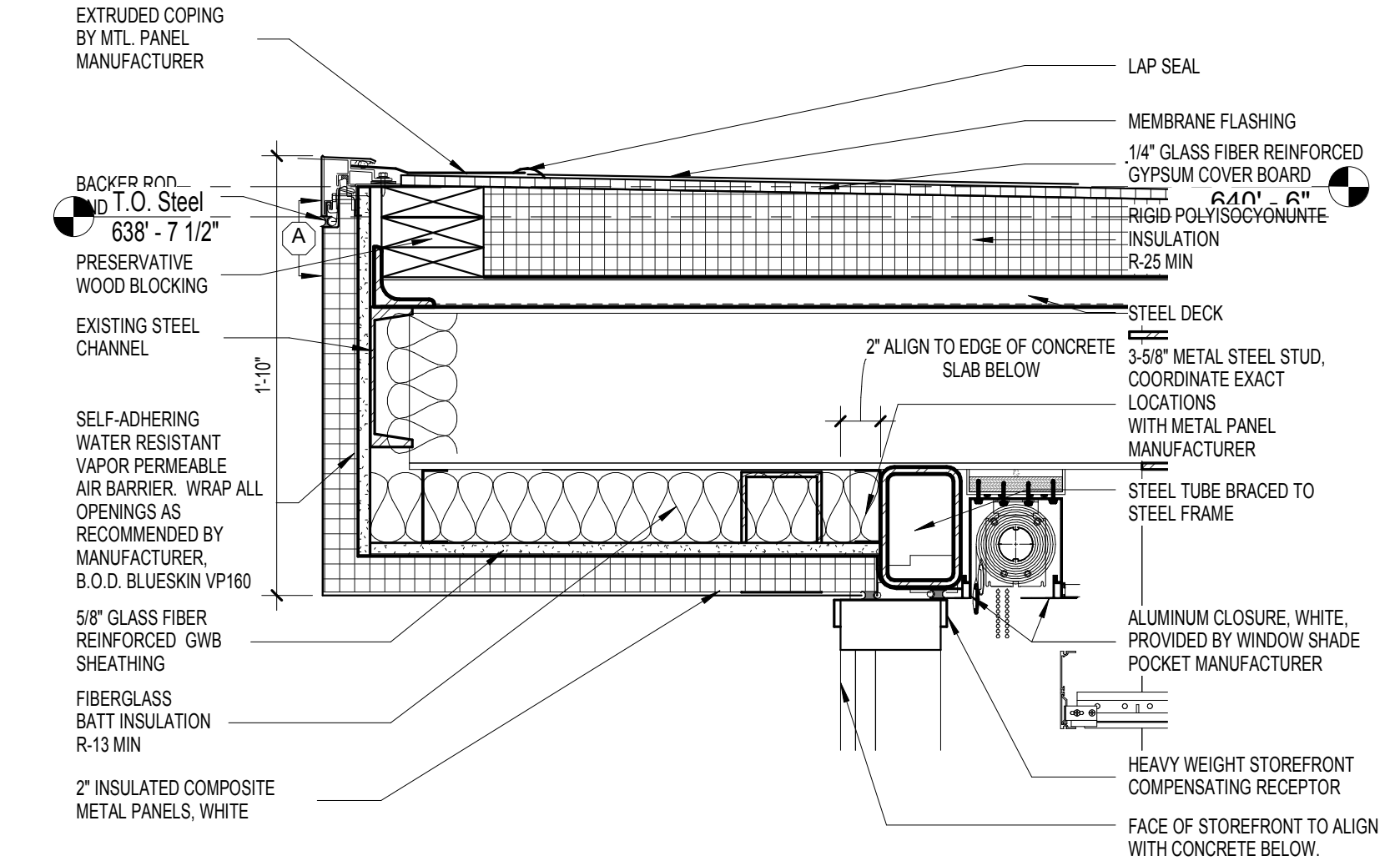
B5 DETAIL @ MECHANICAL AREA DOOR ABOVE KNEE WALL  
1 1/2\"/>



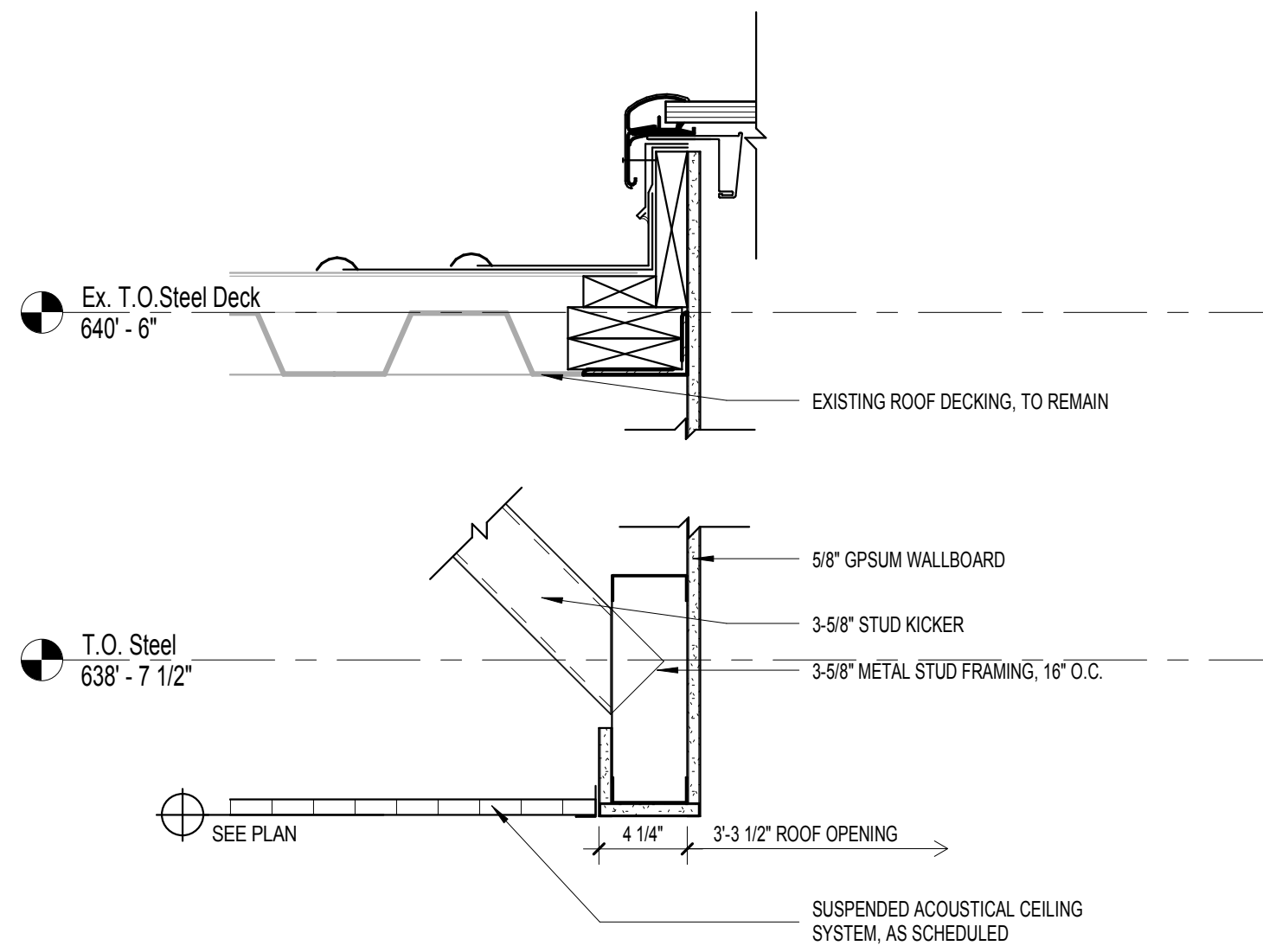
C5 DETAIL @ POOL ENCLOSURE JOINT  
1 1/2\"/>



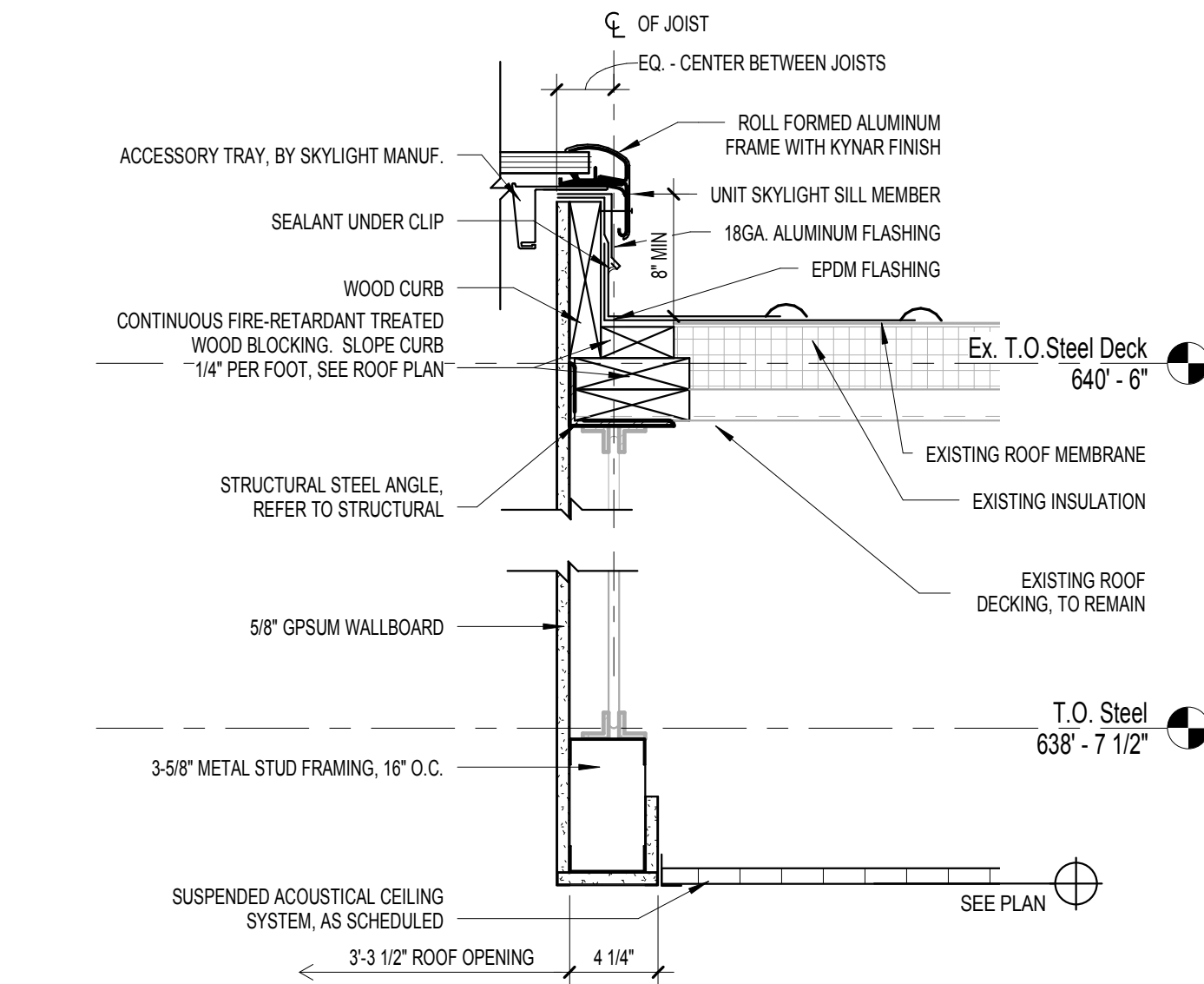
A7 CONCRETE STAIR NOSING DETAIL  
1\"/>



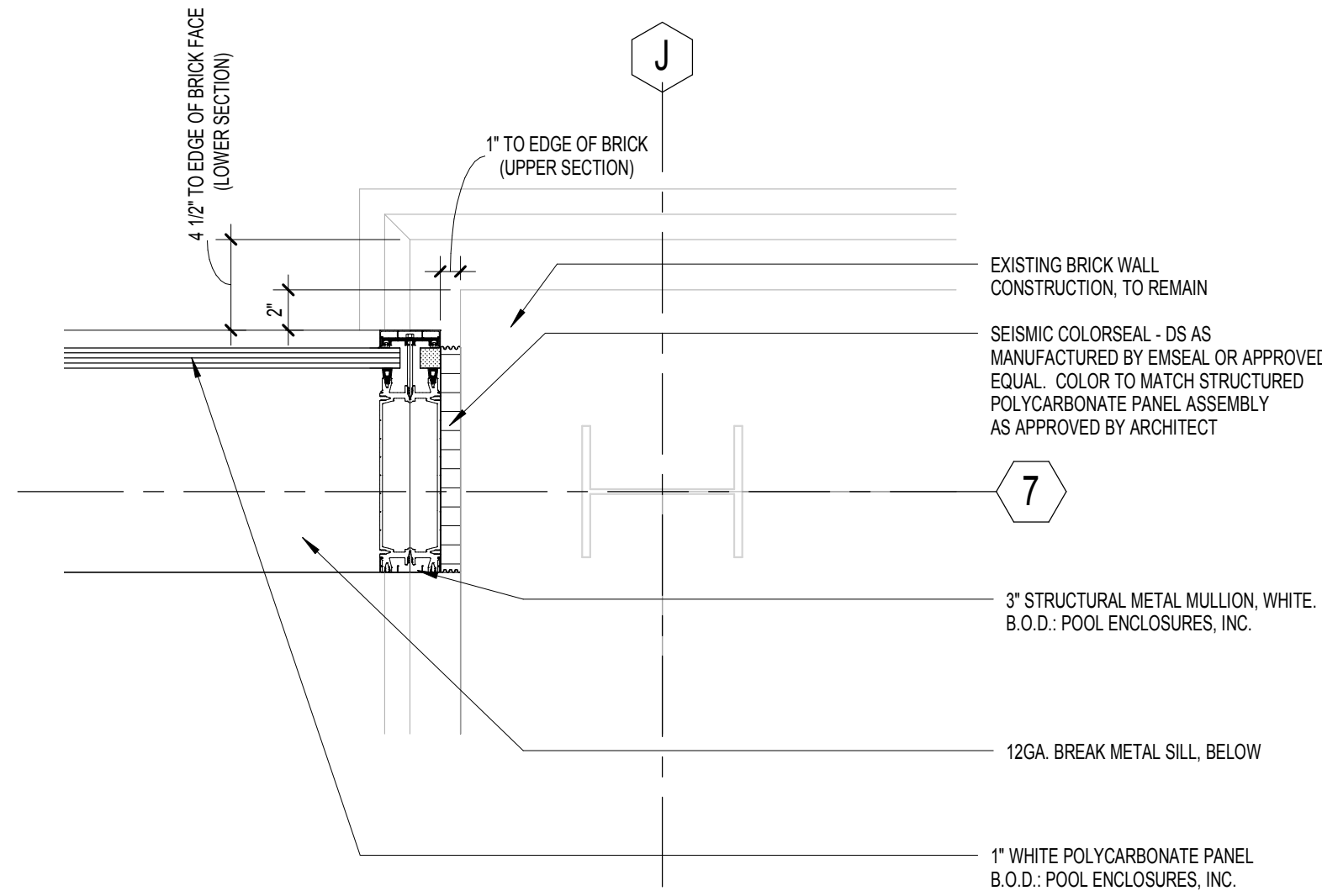
C7 DETAIL @ STAFF BREAK  
1 1/2\"/>



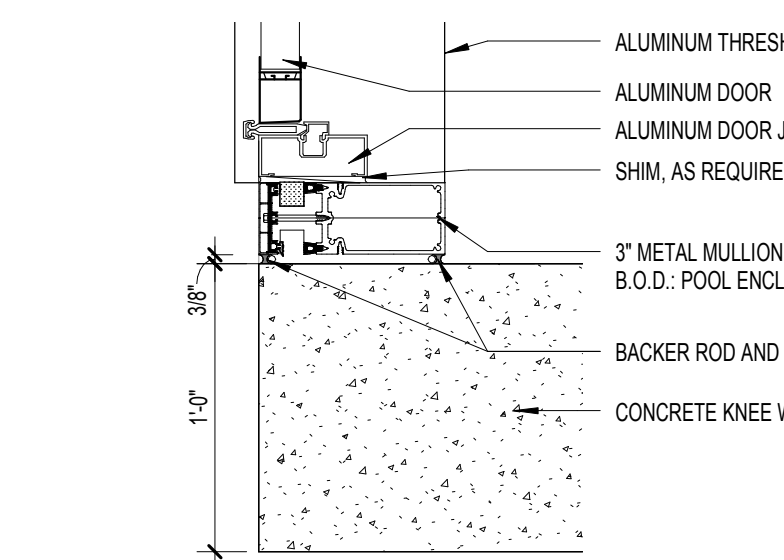
D1 DETAIL @ SKYLIGHT  
1 1/2\"/>



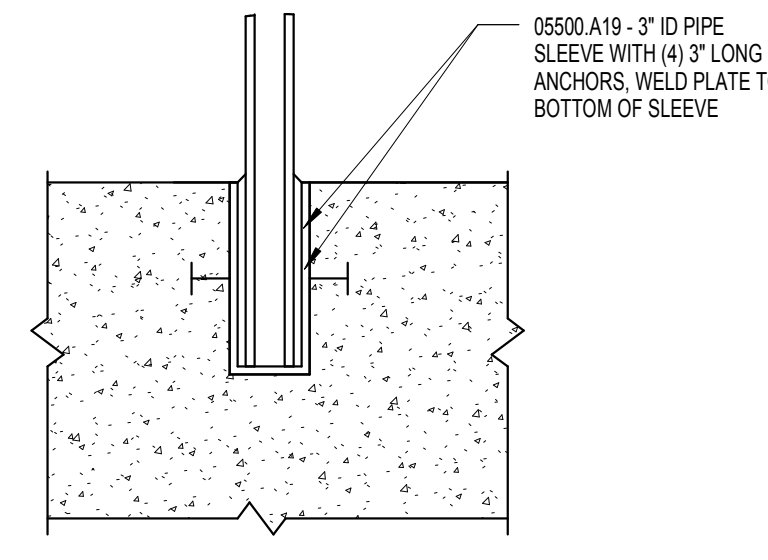
D2 DETAIL @ SKYLIGHT  
1 1/2\"/>



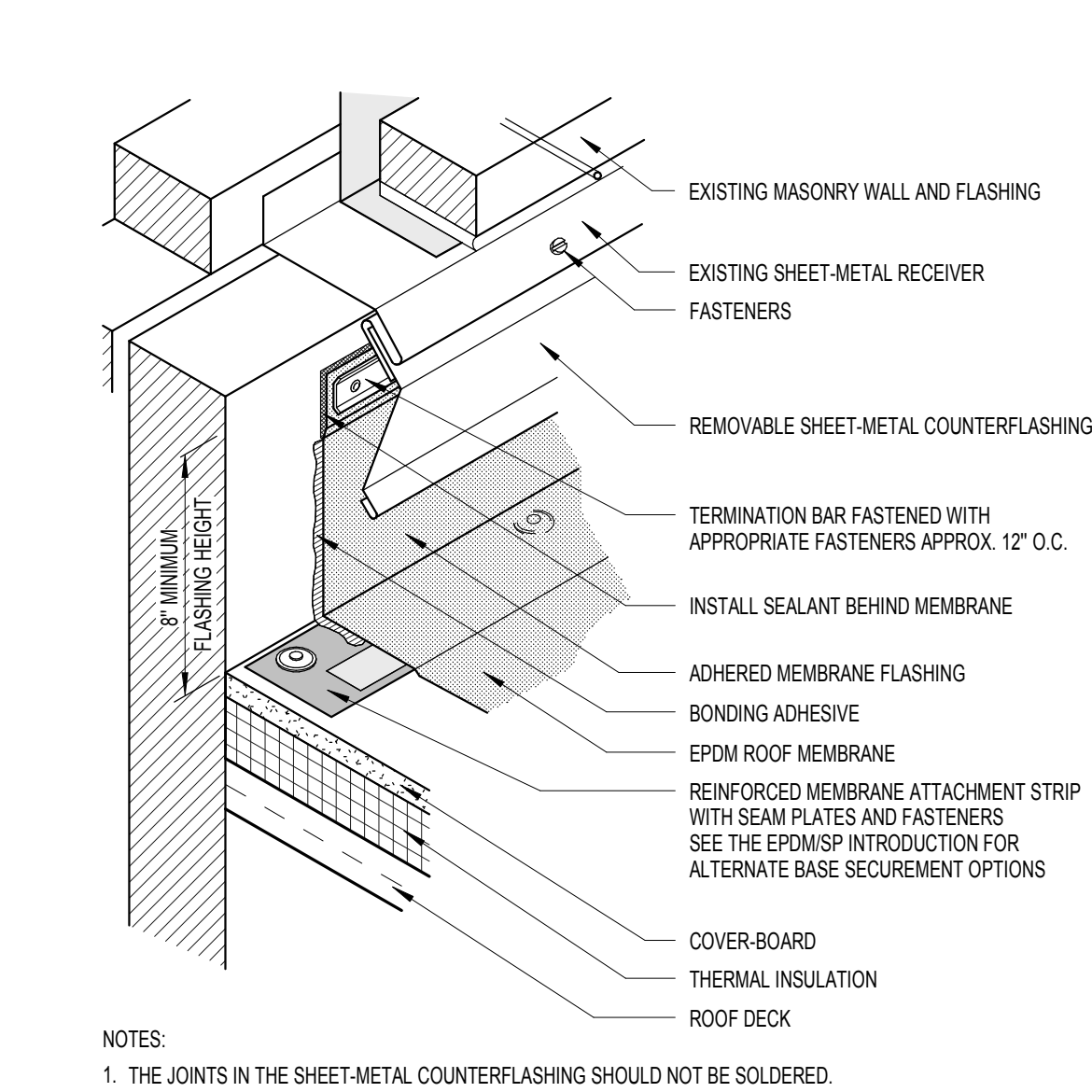
D6 DETAIL @ POOL ENCLOSURE CONNECTION TO BRICK WALL  
1 1/2\"/>



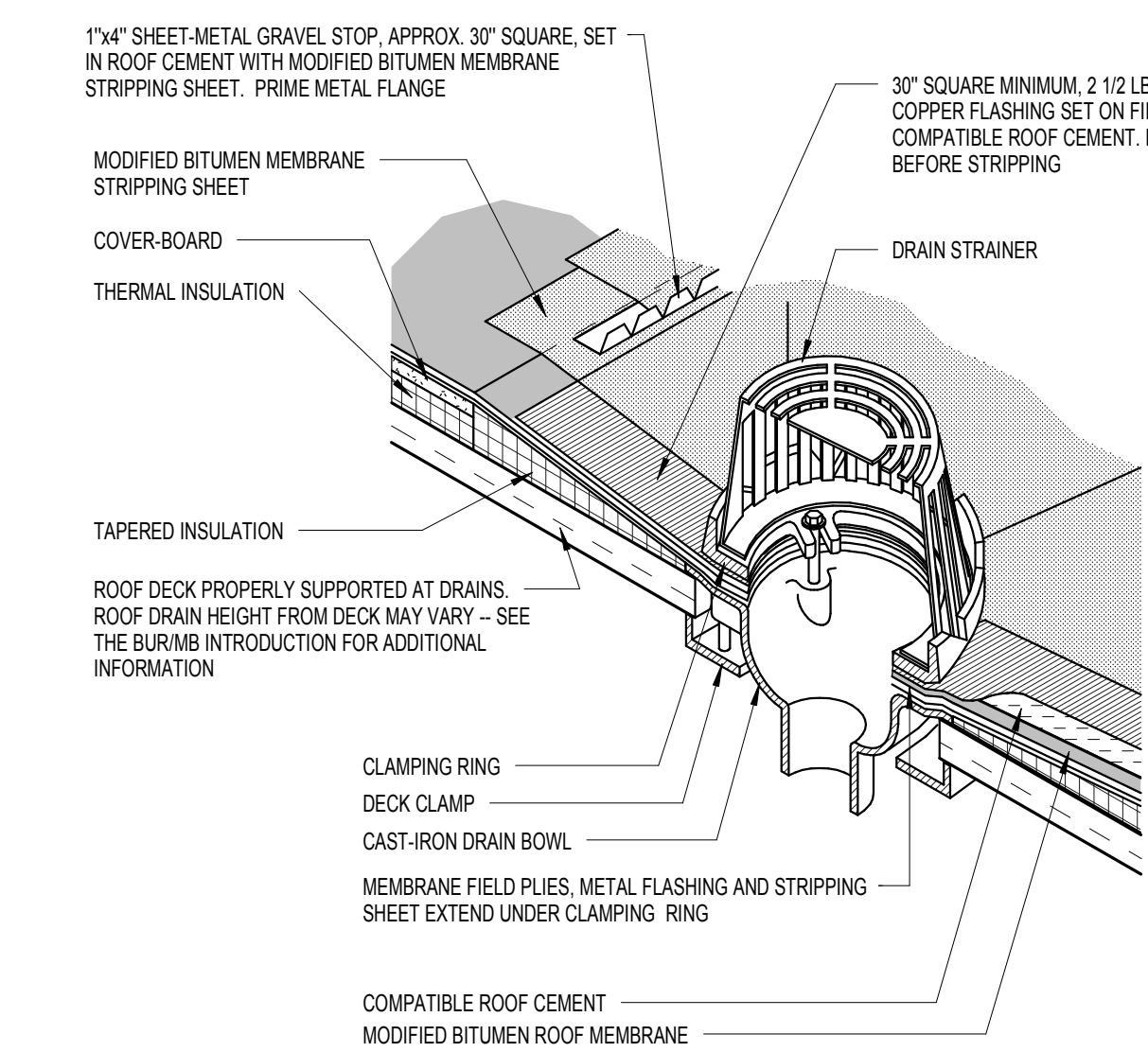
D7 DETAIL @ MECHANICAL AREA DOOR  
1 1/2\"/>



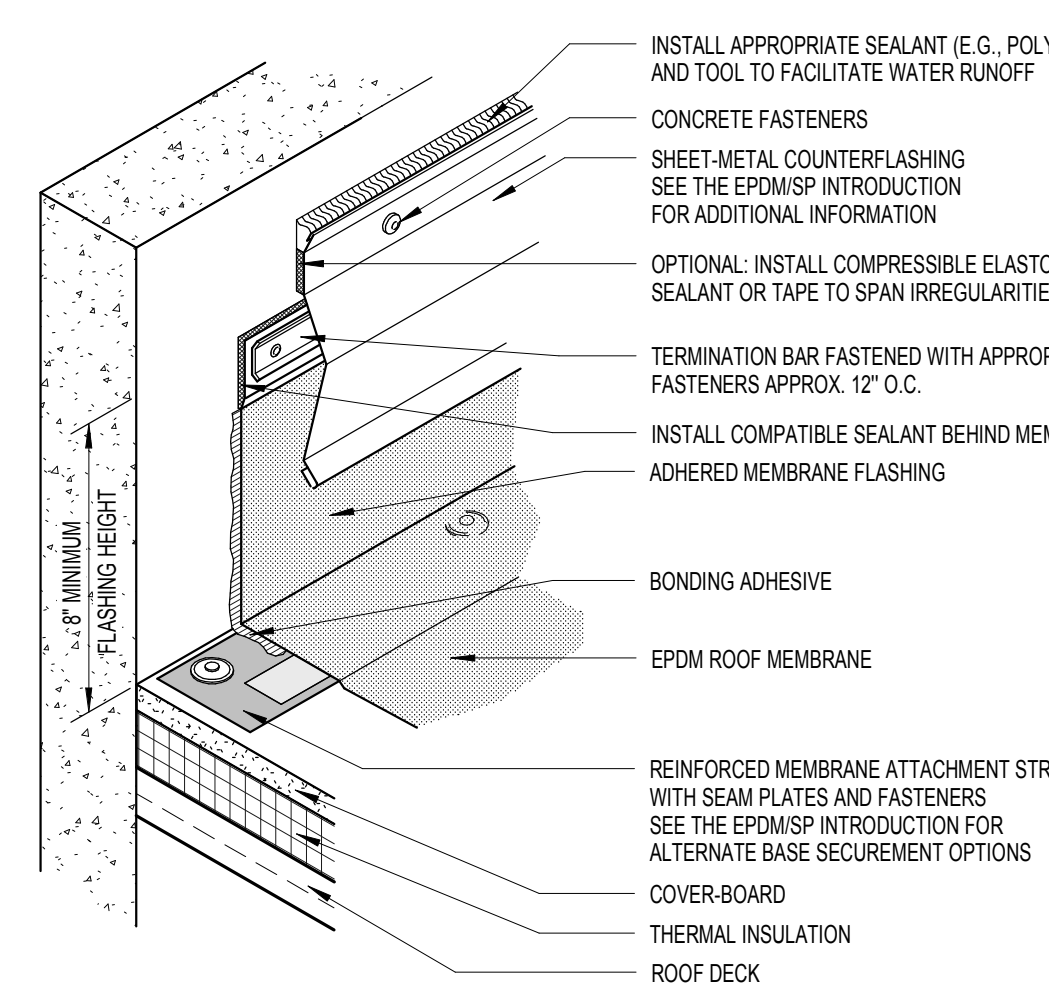
D8 CONCRETE STAIR HANDRAIL ANCHORING DETAIL  
1\"/>



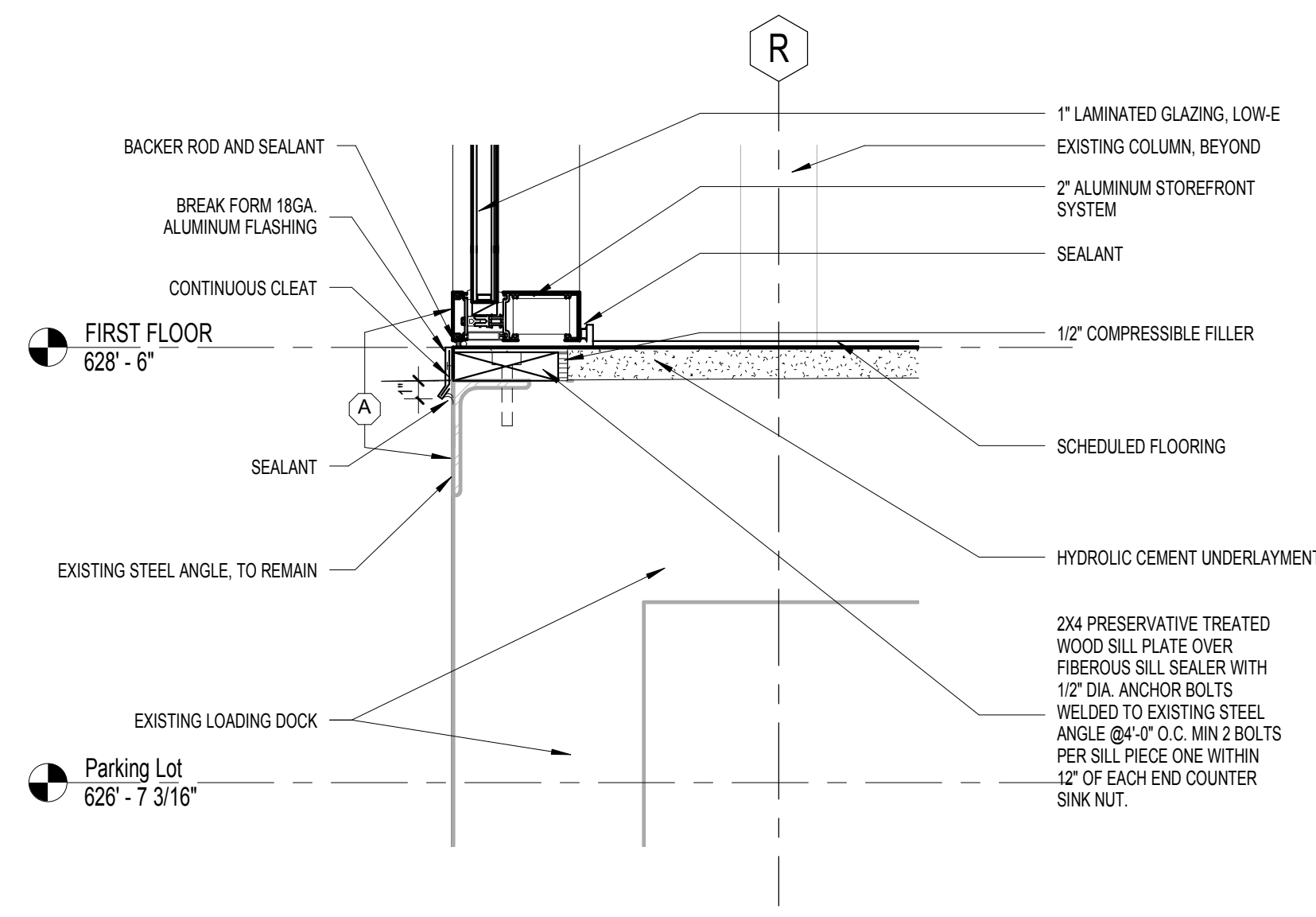
F1 BASE FLASHING AT WALL SUPPORTED DECK  
1:6



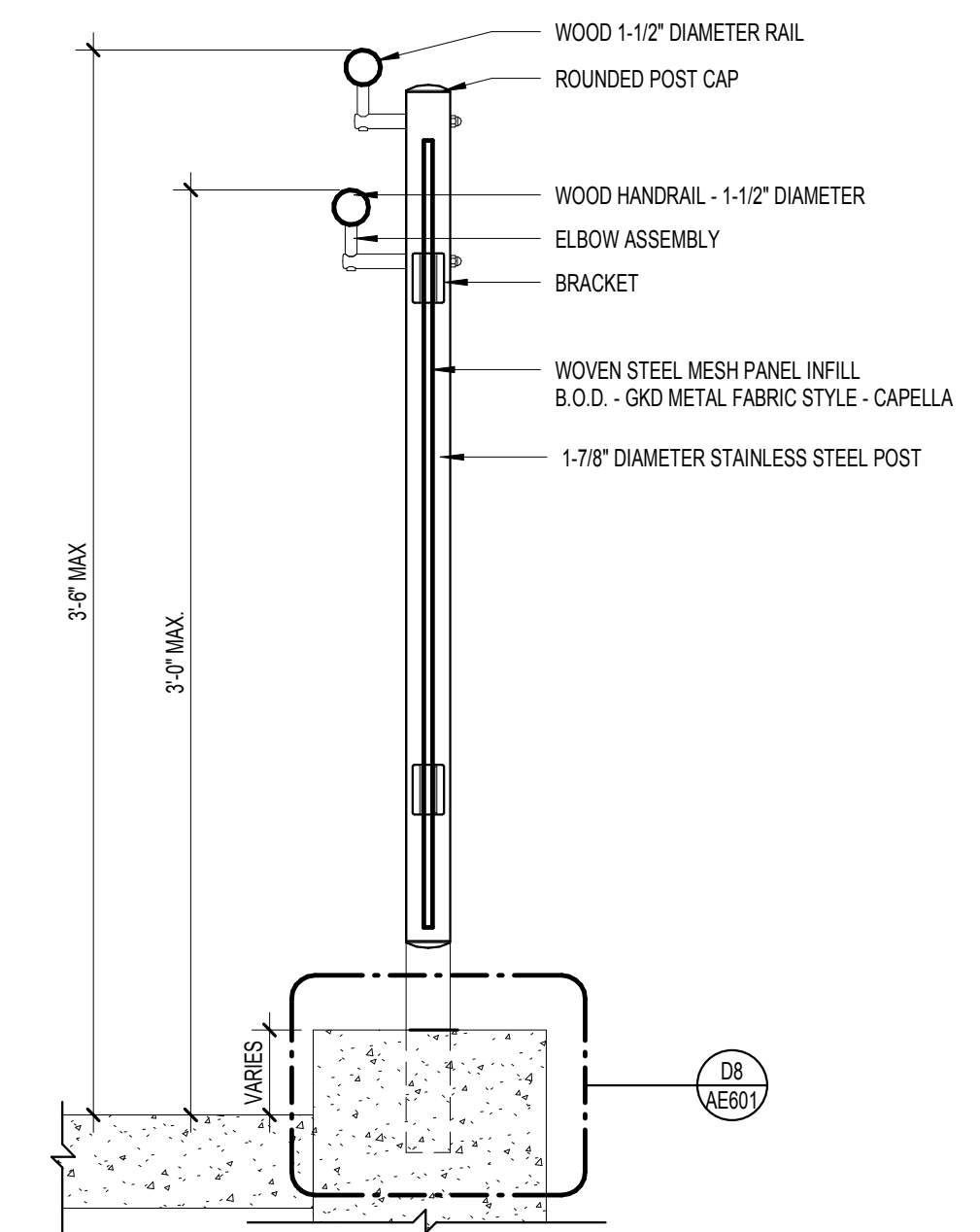
F2 SECTION AT ROOF DRAIN  
1:6



F4 BASE FLASHING W/ SURFACE-MOUNTED COUNTERFLASHING AT CONCRETE WALL  
N.T.S.



F6 DETAIL AT STAFF BREAK  
1 1/2\"/>



F8 TYPICAL RAILING SECTION  
1 1/2\"/>

## CONSULTANTS:

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W. COOK ARCHITECTS

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COATESVILLE, PA 19320  
Tel: (610) 383-4460

## PROJECT MANAGER:

**Bray Mooney Consulting**

Project Number  
3627

Scale  
As indicated

Drawing Title

EXTERIOR AND ROOF DETAILS

Approved: Project Director

Project Title  
RENOVATE BUILDING 69

Building Number  
69

Location  
1400 Black Horse Hill, Coatesville, PA

Date  
03-29-13

Checked  
TN

Drawn  
BG

VA Project Number  
542-CSI-203

Building Number  
69

Drawing Number  
AE601

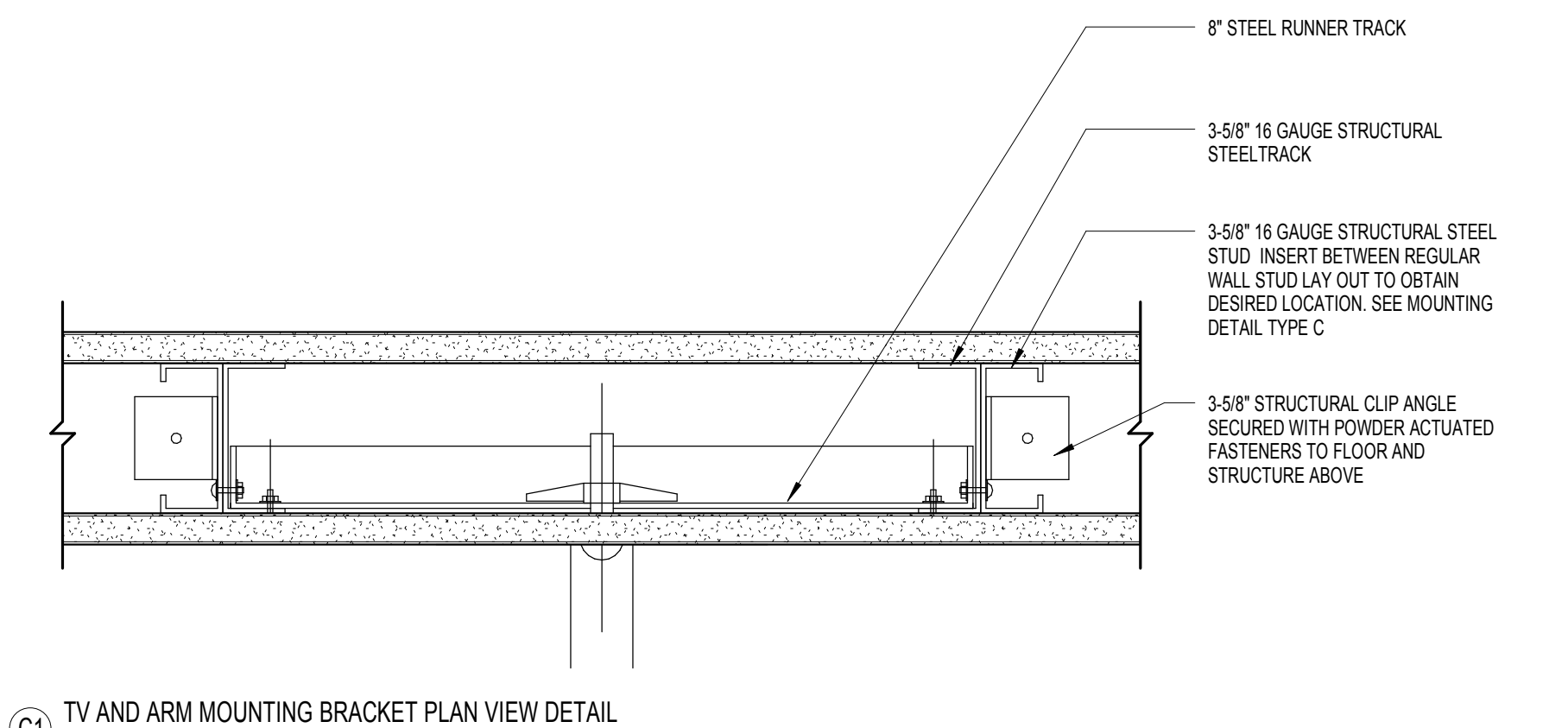
Dwg. 31 of 86

Office of  
Facilities  
Management

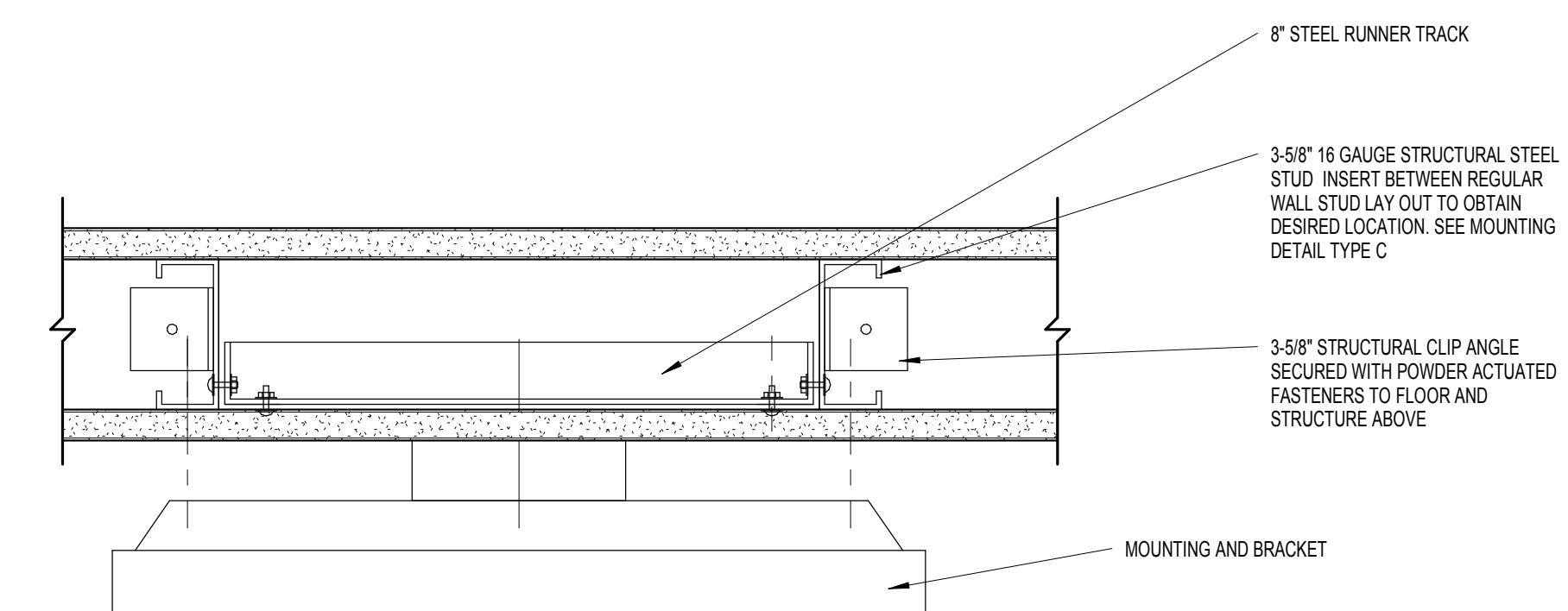
Department of  
Veterans Affairs

FULLY SPRINKLERED  
NOTE: SEE SHEET AE-002 FOR DEDUCT ALTERNATES ISSUED FOR BID

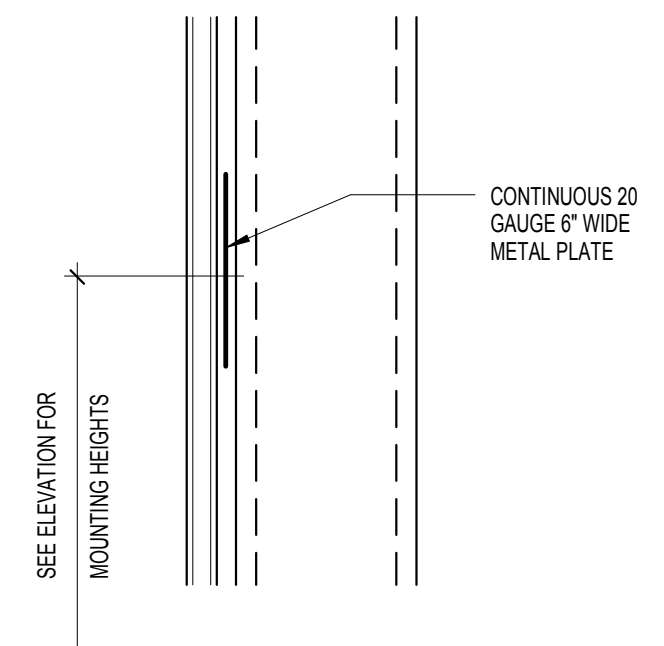




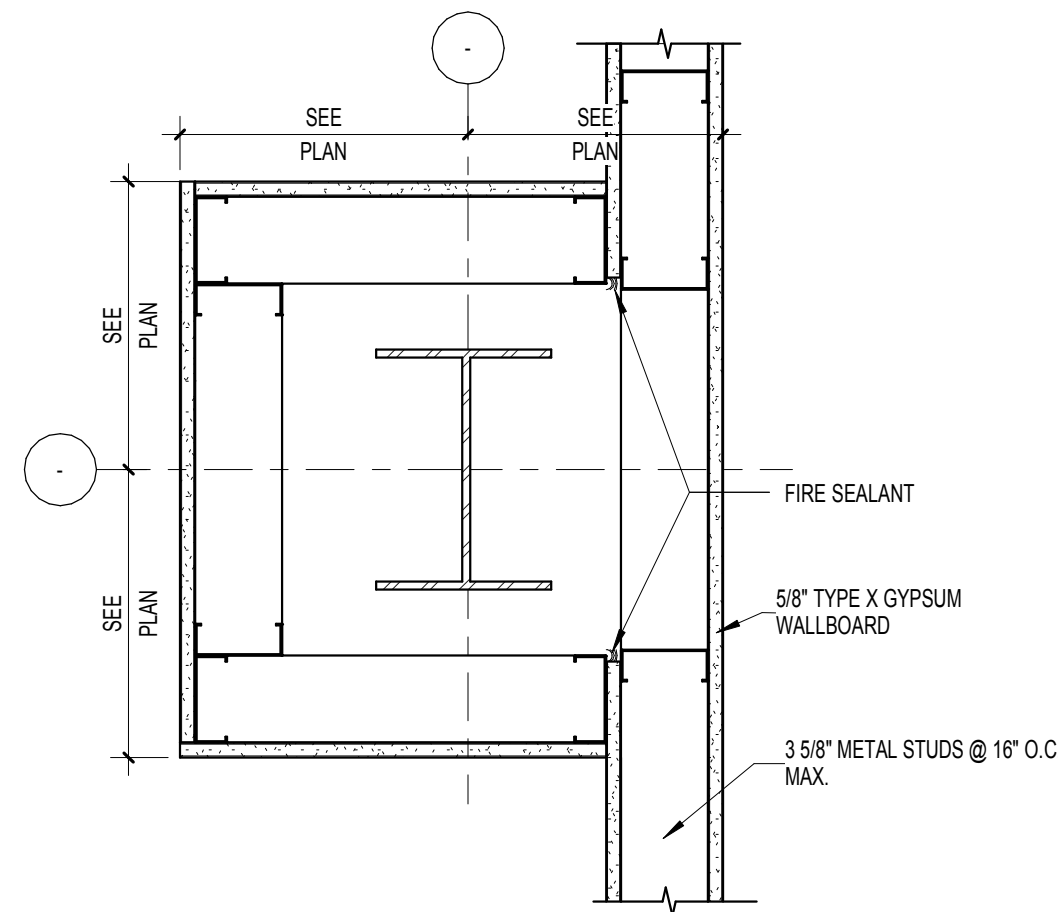
(C1) TV AND ARM MOUNTING BRACKET PLAN VIEW DETAIL  
3\"/>



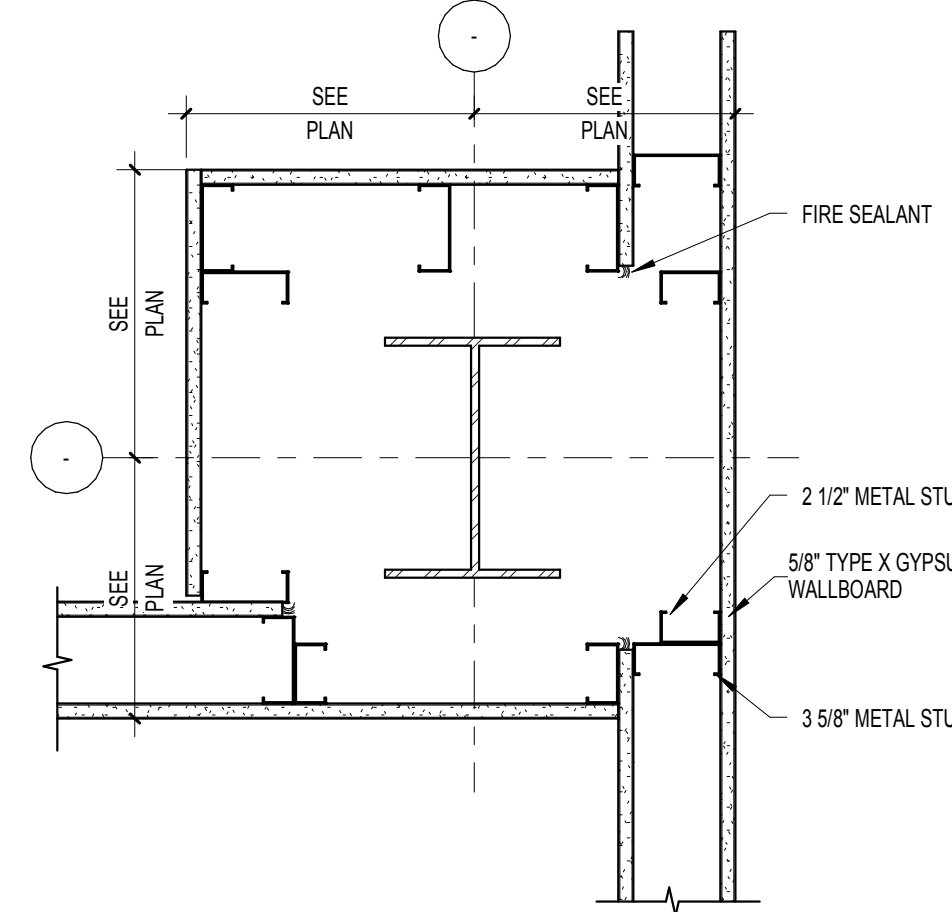
(D1) TV MOUNTING BRACKET PLAN VIEW DETAIL - SURFACE MOUNTED  
3\"/>



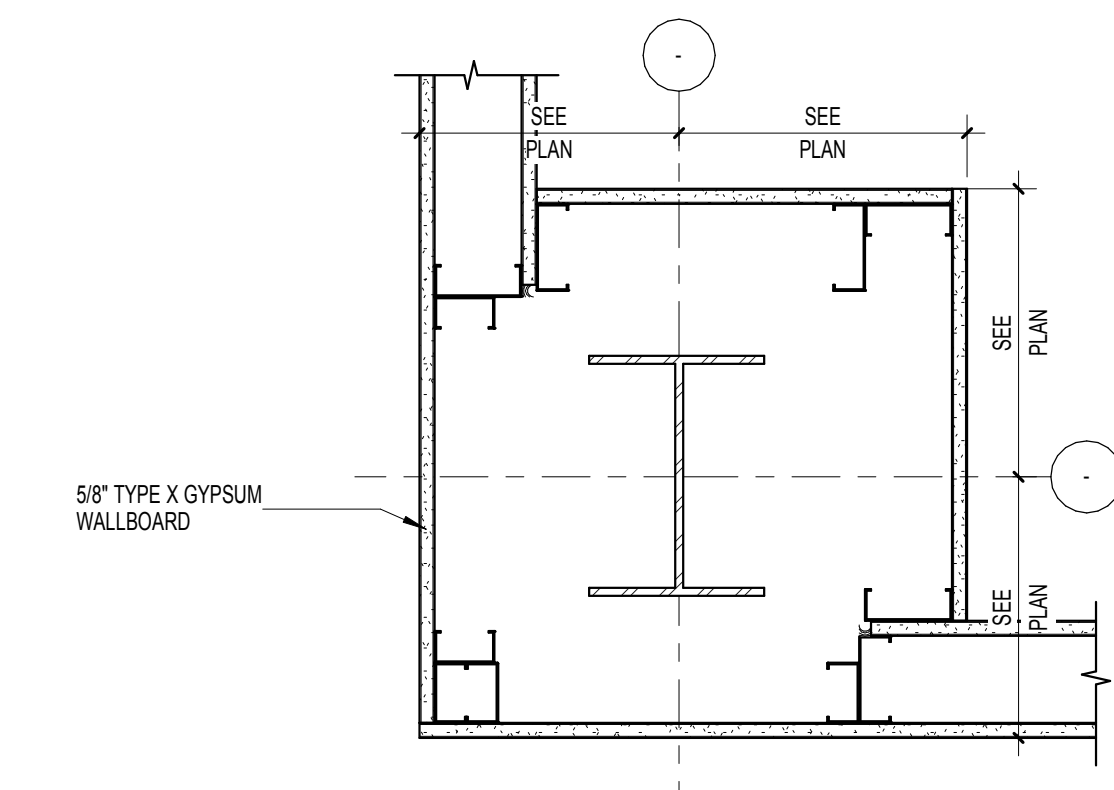
(D3) ACCESSORY/EQUIPMENT MOUNTING DETAIL TYPE A  
3\"/>



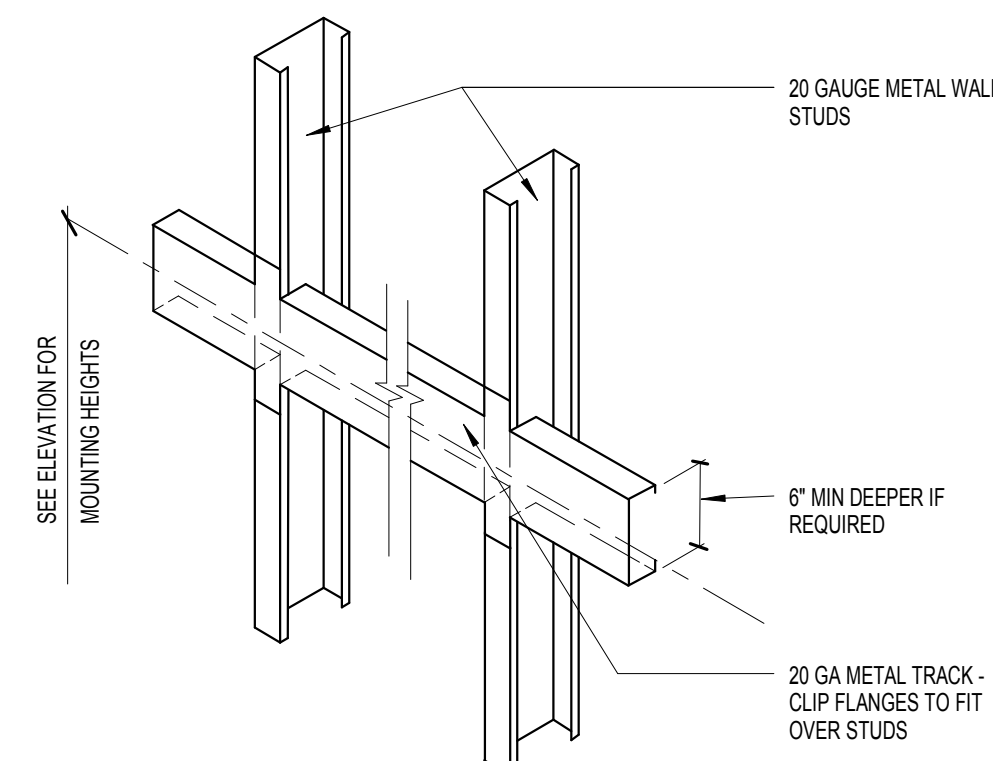
(B4) RATED COLUMN JOINT DETAIL 3  
1 1/2\"/>



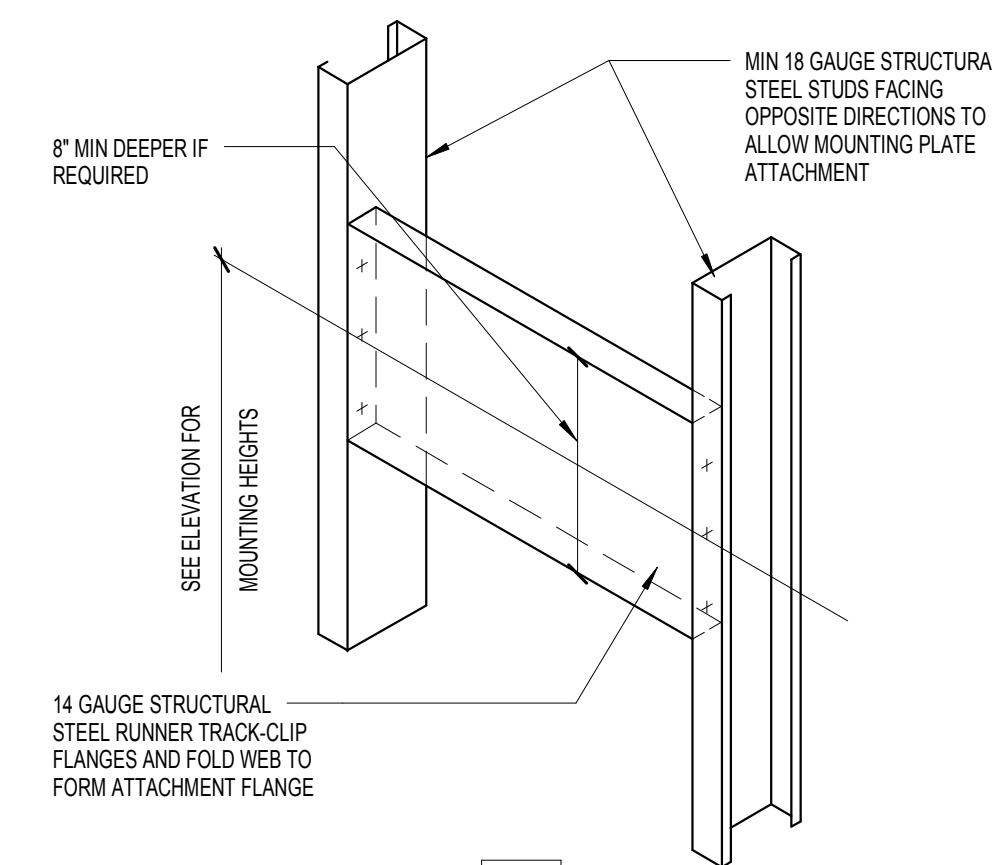
(B6) RATED COLUMN JOINT DETAIL 2  
1 1/2\"/>



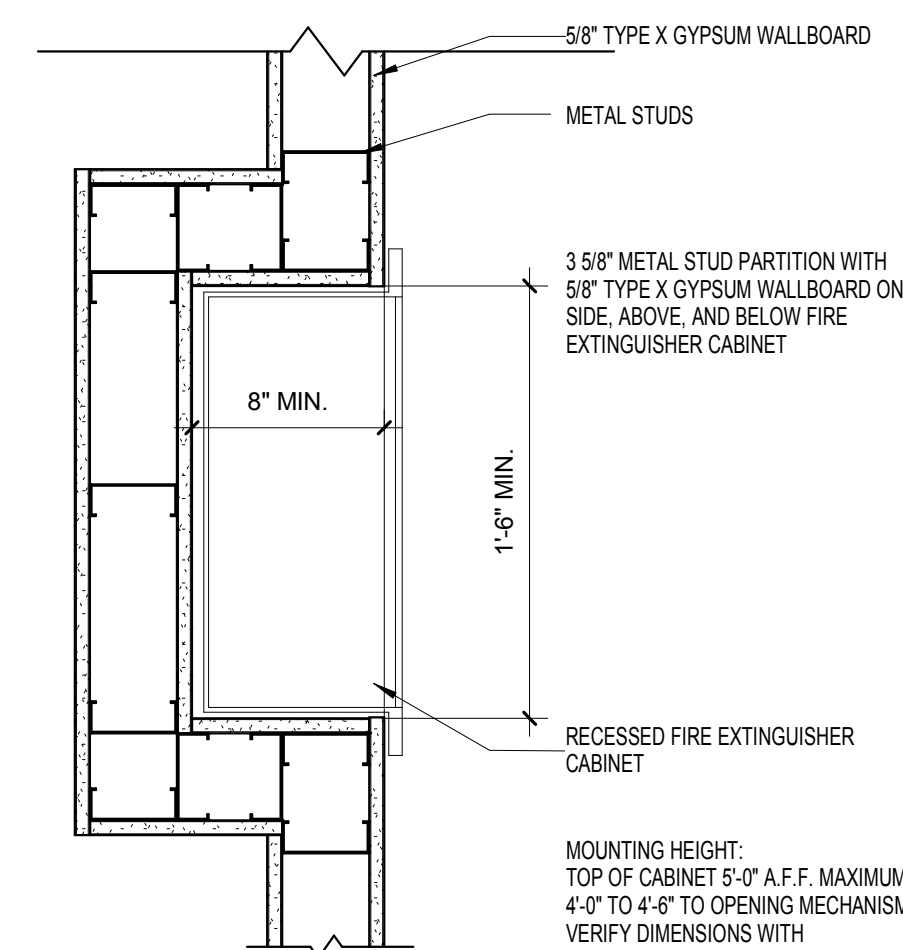
(B8) RATED COLUMN JOINT DETAIL  
1 1/2\"/>



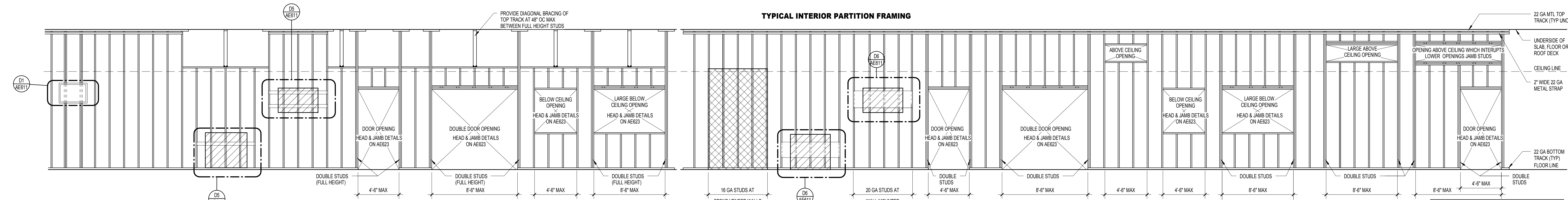
(D5) ACCESSORY/EQUIPMENT MOUNTING DETAIL TYPE B  
3\"/>



(D6) ACCESSORY/EQUIPMENT MOUNTING DETAIL TYPE C  
3\"/>



(D8) FIRE EXTINGUISHER CABINET  
1 1/2\"/>



(F1) TYPICAL INTERIOR PARTITION FRAMING  
1 1/4\"/>

ACCESSORY/EQUIPMENT MOUNTING DETAILS

PARTITION FRAMING DETAILS

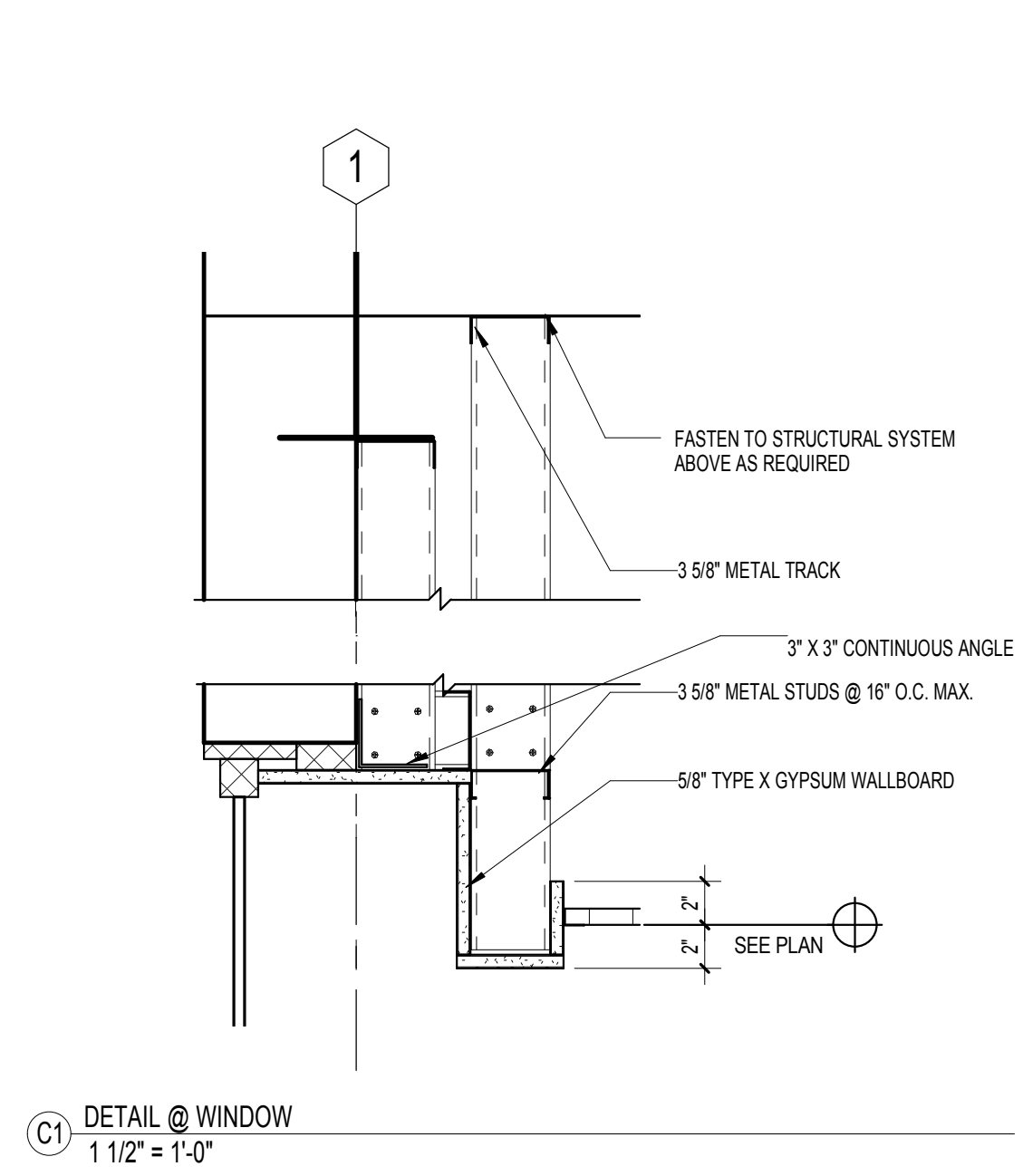
- NOTES:
1. ALL STUDS ARE SPACED 16\"/>

NOTE: SEE SHEET AE-002 FOR DEDUCT ALTERNATES ISSUED FOR BID

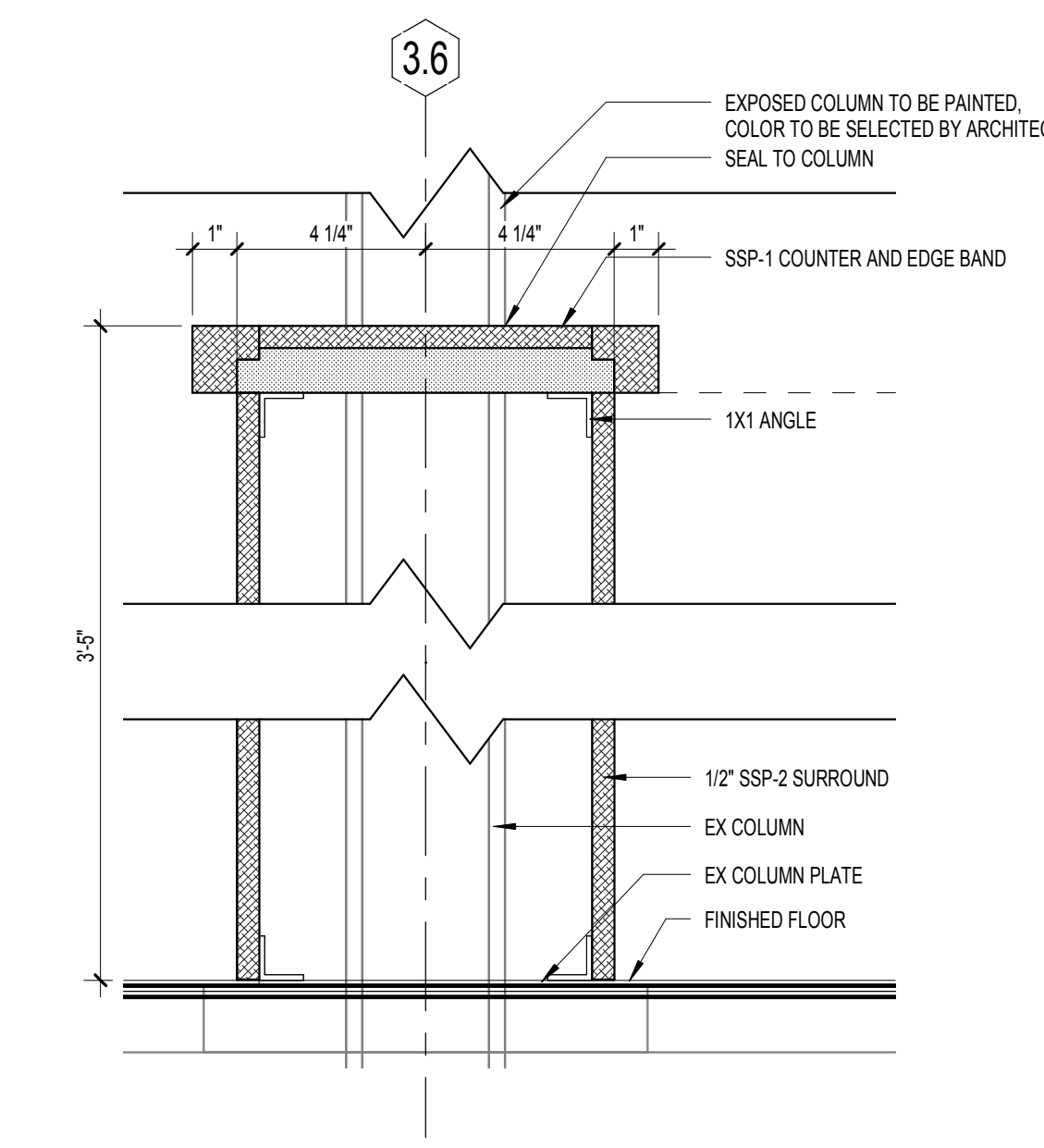
<b>CONSULTANTS:</b>										<b>PROJECT MANAGER:</b>		Project Number 3627	Scale As indicated	Drawing Title <b>FRAMING DETAILS</b>	Project Title <b>RENOVATE BUILDING 69</b>	VA Project Number <b>542-CSI-203</b>	<b>Office of Facilities Management</b>  
<b>Project Manager</b> <b>BRAY MOONEY CONSULTING</b>  410 E. 21 STREET CHESTER, PA. 19013 Tel: (610) 872-3716	<b>Architect</b> <b>ARRAY HEALTHCARE FACILITIES SOLUTIONS</b>  2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA. 19406 Tel: (610) 297-5599	<b>Structural Engineer</b> <b>WZG, STRUCTURAL CONSULTING ENGINEERS</b>  P.O. BOX 24 40 LITTLE ROAD ZIEGLERVILLE, PA. 19482 Tel: (610) 297-3194	<b>ME/FP/FP Engineer</b> <b>APOGEE CONSULTING GROUP</b>  7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC. 27606 Tel: (919) 858-7420	<b>Civil Engineer</b> <b>GUIDON DESIGN</b>  2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 800-6388	<b>Fire Protection Consultant</b> <b>HARRINGTON GROUP</b>  7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC. 28277 Tel: (704) 531-6077	<b>Cost Estimator</b> <b>BRAY MOONEY CONSULTING</b>  410 E. 21 STREET CHESTER, PA. 19013 Tel: (610) 872-3716	<b>Aquatic Consultant</b> <b>ATLANTIC AQUATIC ENGINEERING</b>  1823 DEEP RUN ROAD PIPERSVILLE, PA. 18947 Tel: (215) 786-0409	<b>Associate Architects</b> <b>W. COOK ARCHITECTS</b>  1251 ROMANSVILLE ROAD COATESVILLE, PA. 19320 Tel: (610) 383-4460					Building Number 69	Location <b>1400 Black Horse Hill, Coatesville, PA</b>	Drawing Number <b>AE611</b>		
<b>Revisions</b>										Approved: Project Director		Date 03-29-13		Checked TN	Drawn BG	Dwg. 32 of 86	
<b>Date</b>																	



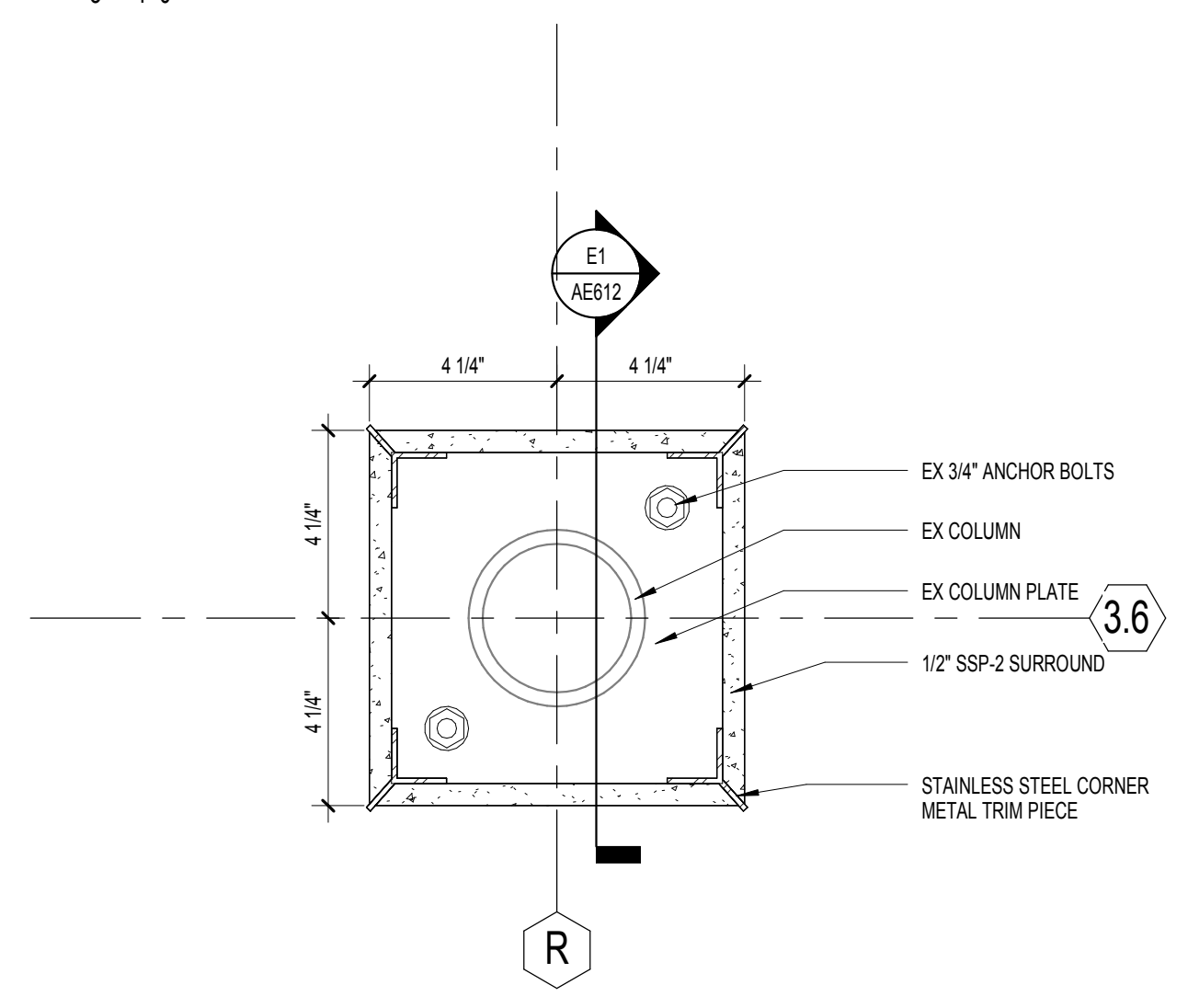
three inches = one foot  
one and one half inches = one foot  
one inch = one foot  
three quarters inch = one foot  
one half inch = one foot  
three eighths inch = one foot  
one quarter inch = one foot  
one eighth inch = one foot



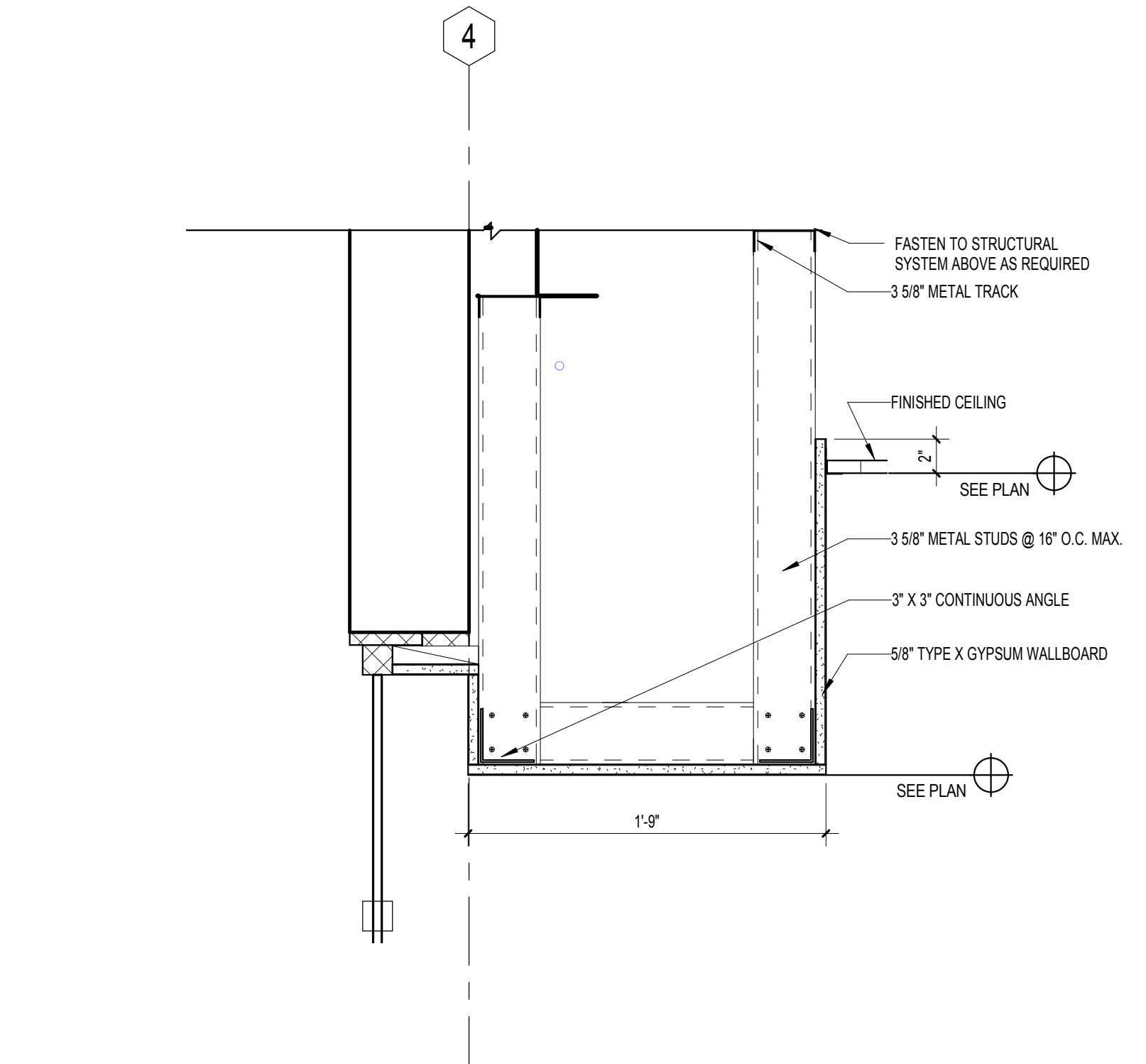
C1 DETAIL @ WINDOW  
1 1/2" = 1'-0"



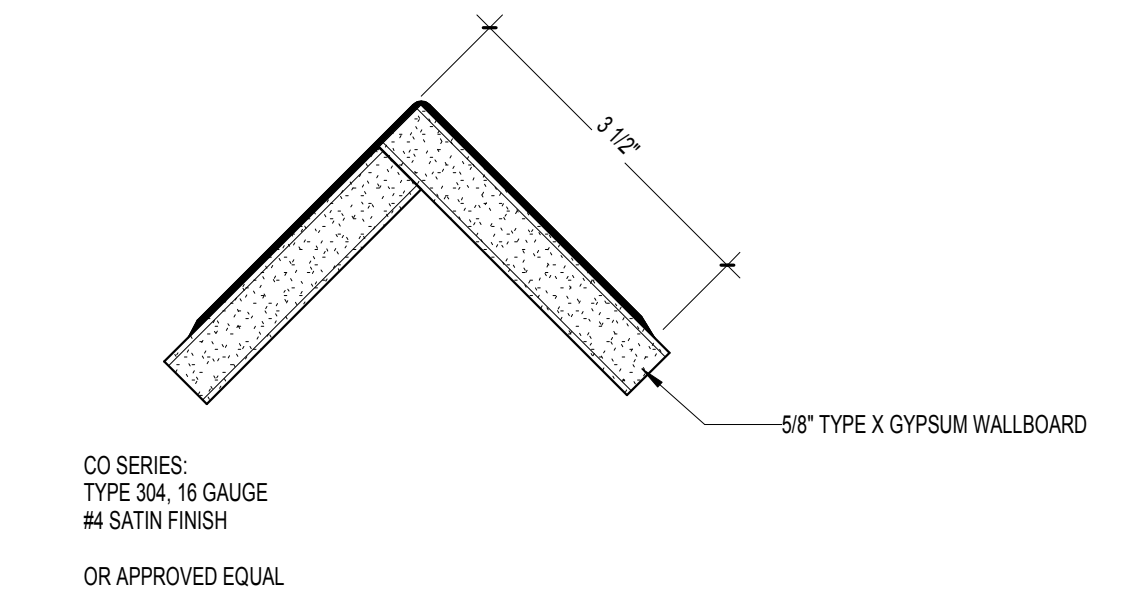
E1 COLUMN SECTION  
3" = 1'-0"



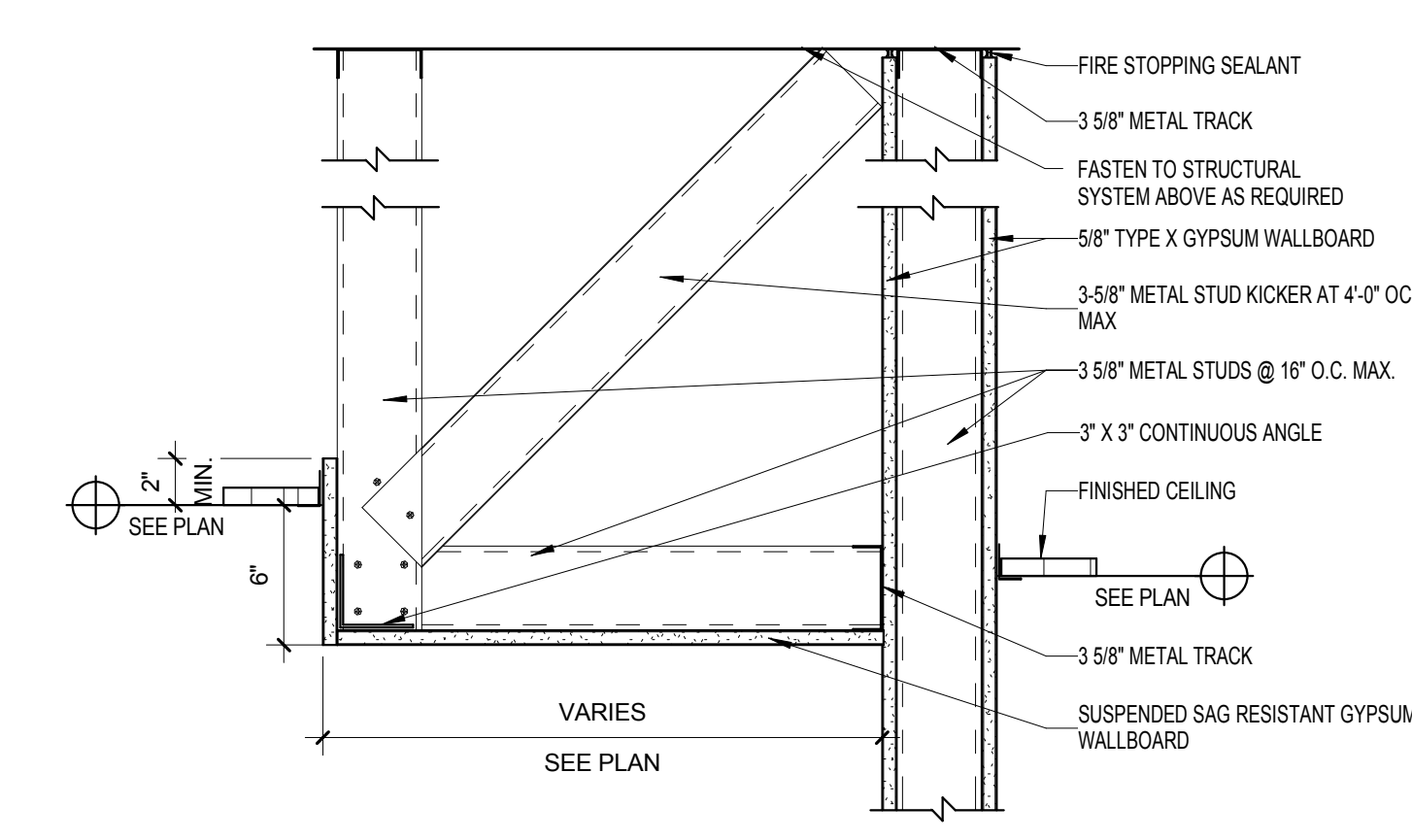
F1 EX COLUMN WRAP DETAIL  
3" = 1'-0"



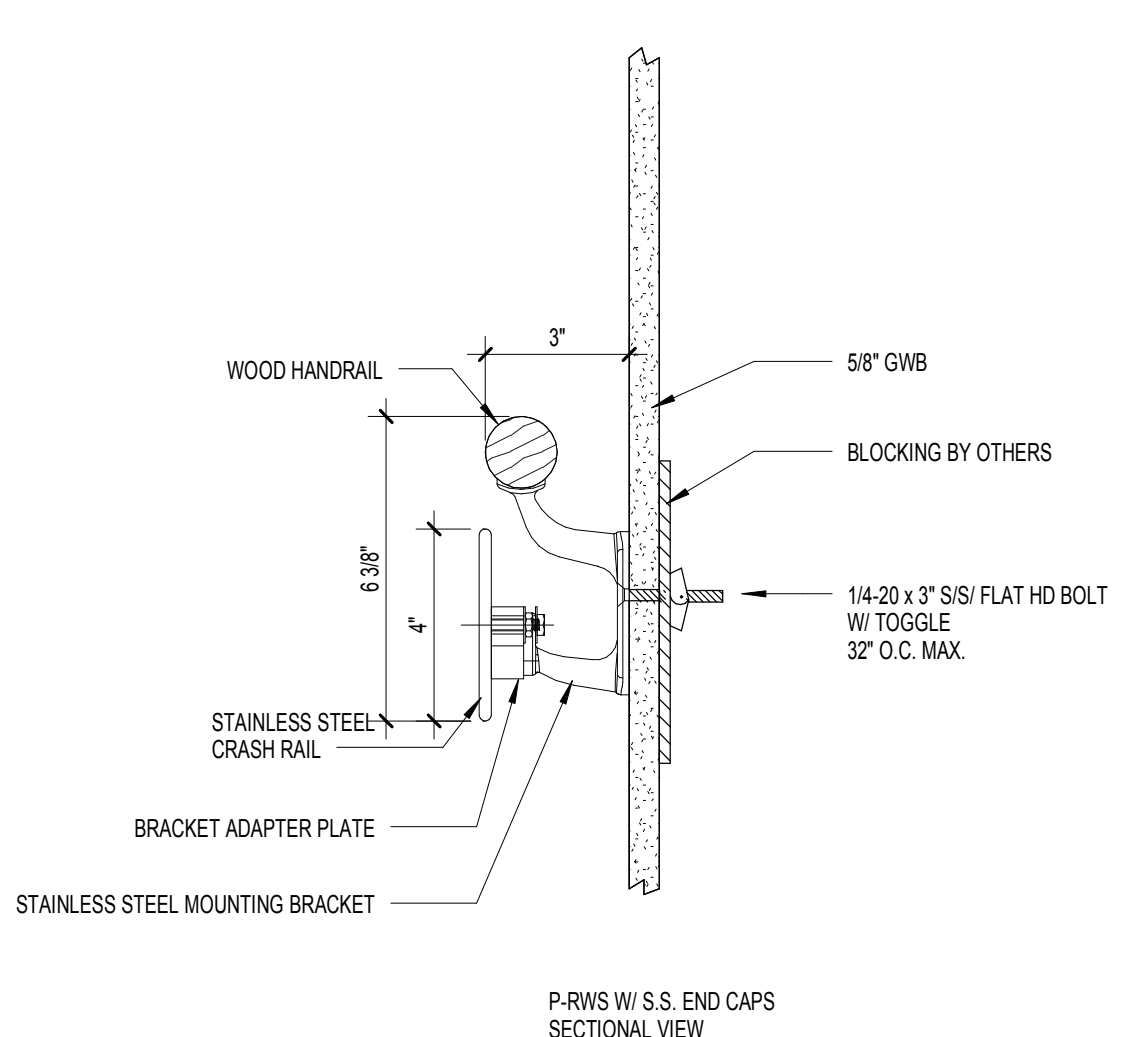
C2 DETAIL @ WINDOW POCKET  
1 1/2" = 1'-0"



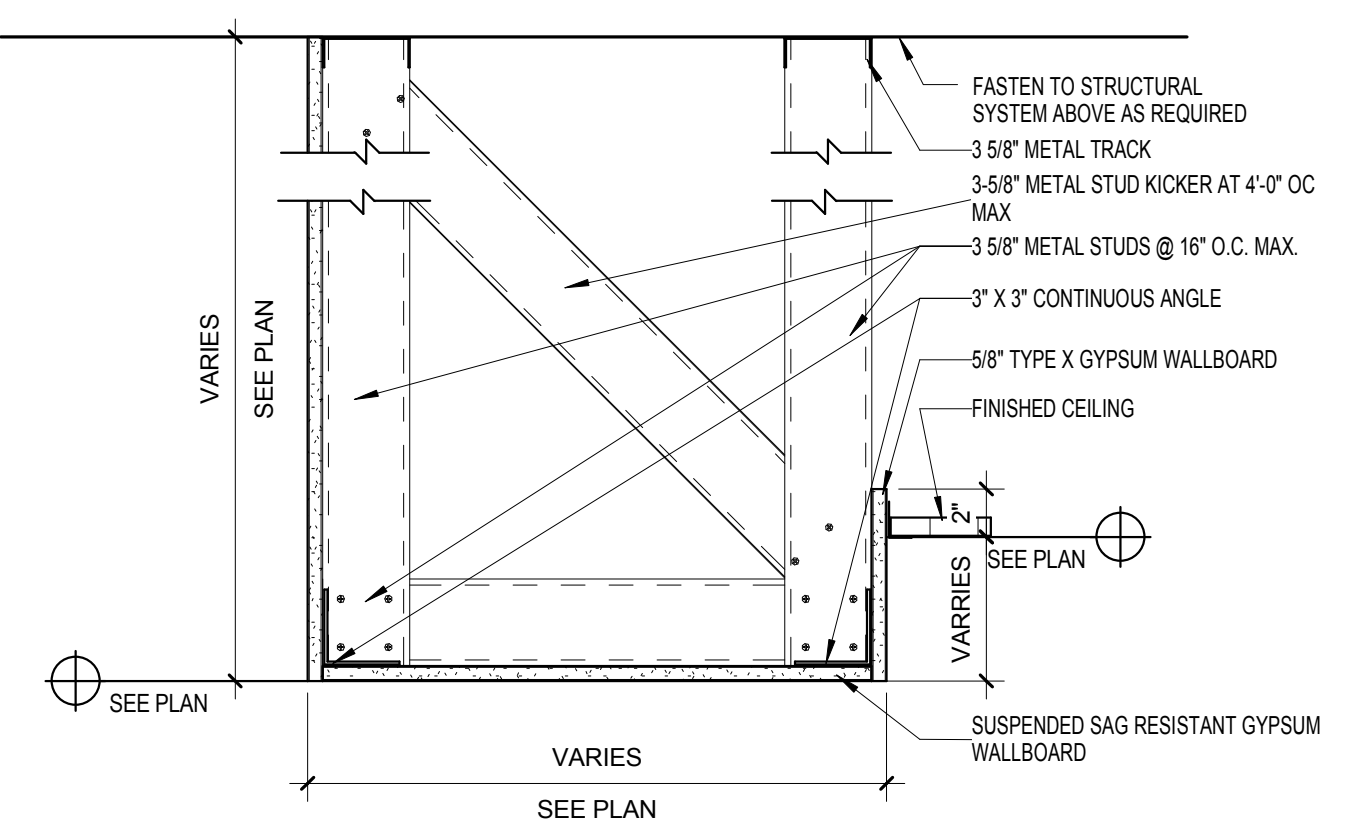
E2 STAINLESS STEEL CORNER GUARD  
6" = 1'-0"



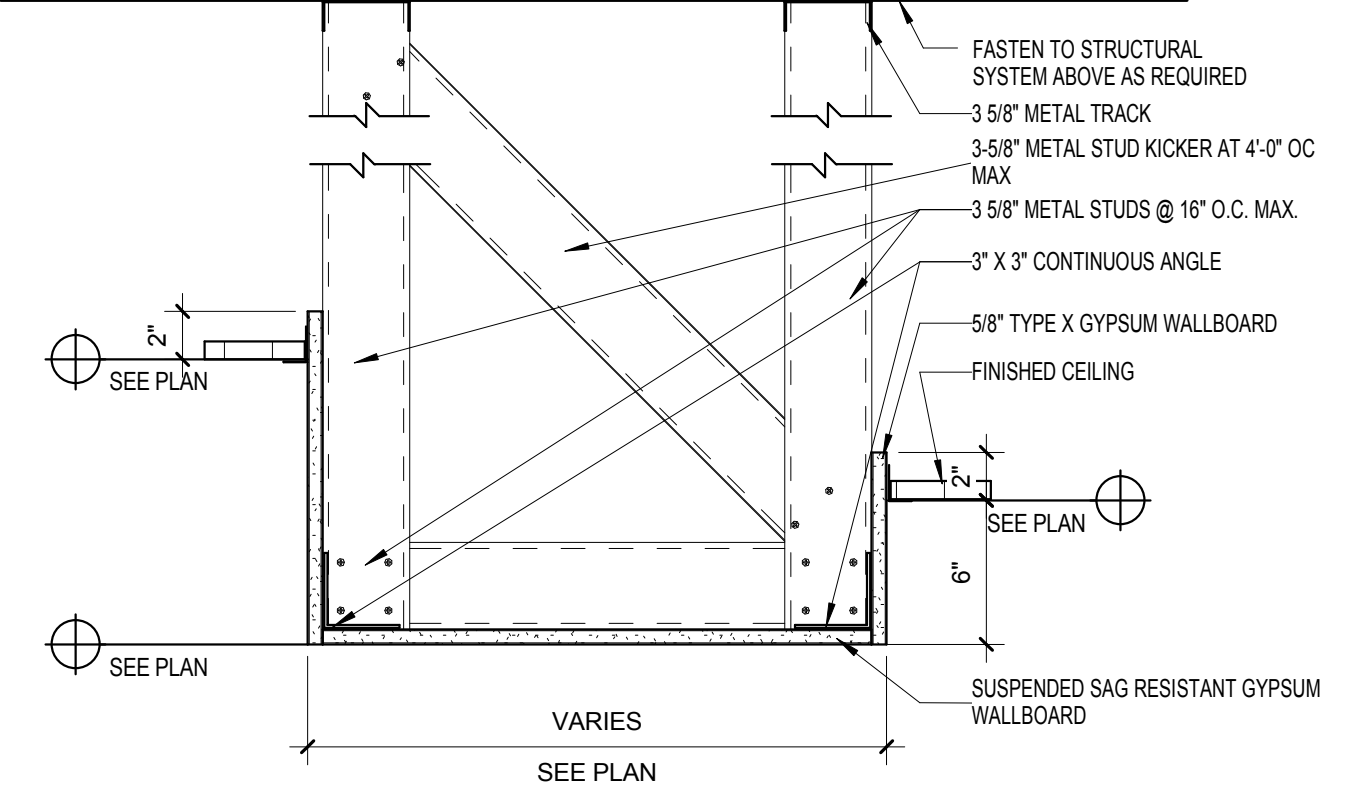
F2 SOFFIT DETAIL 2  
1 1/2" = 1'-0"



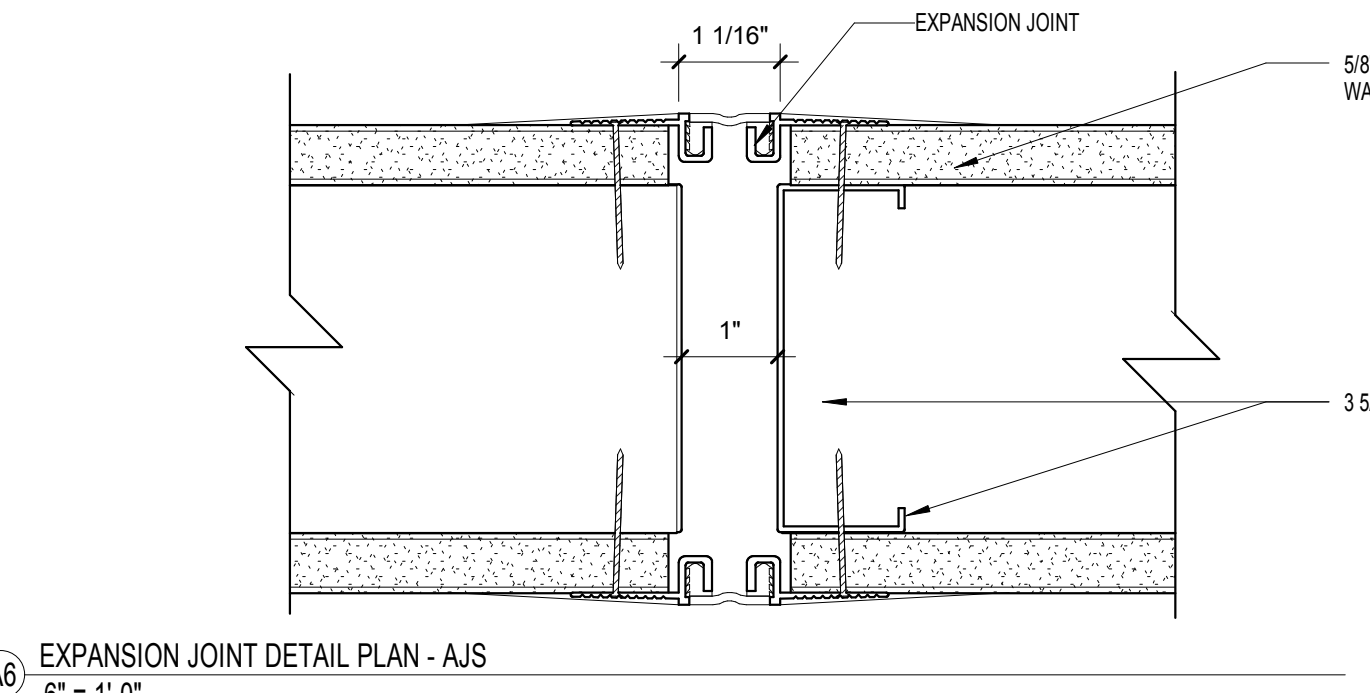
C4 P-RWS  
3" = 1'-0"



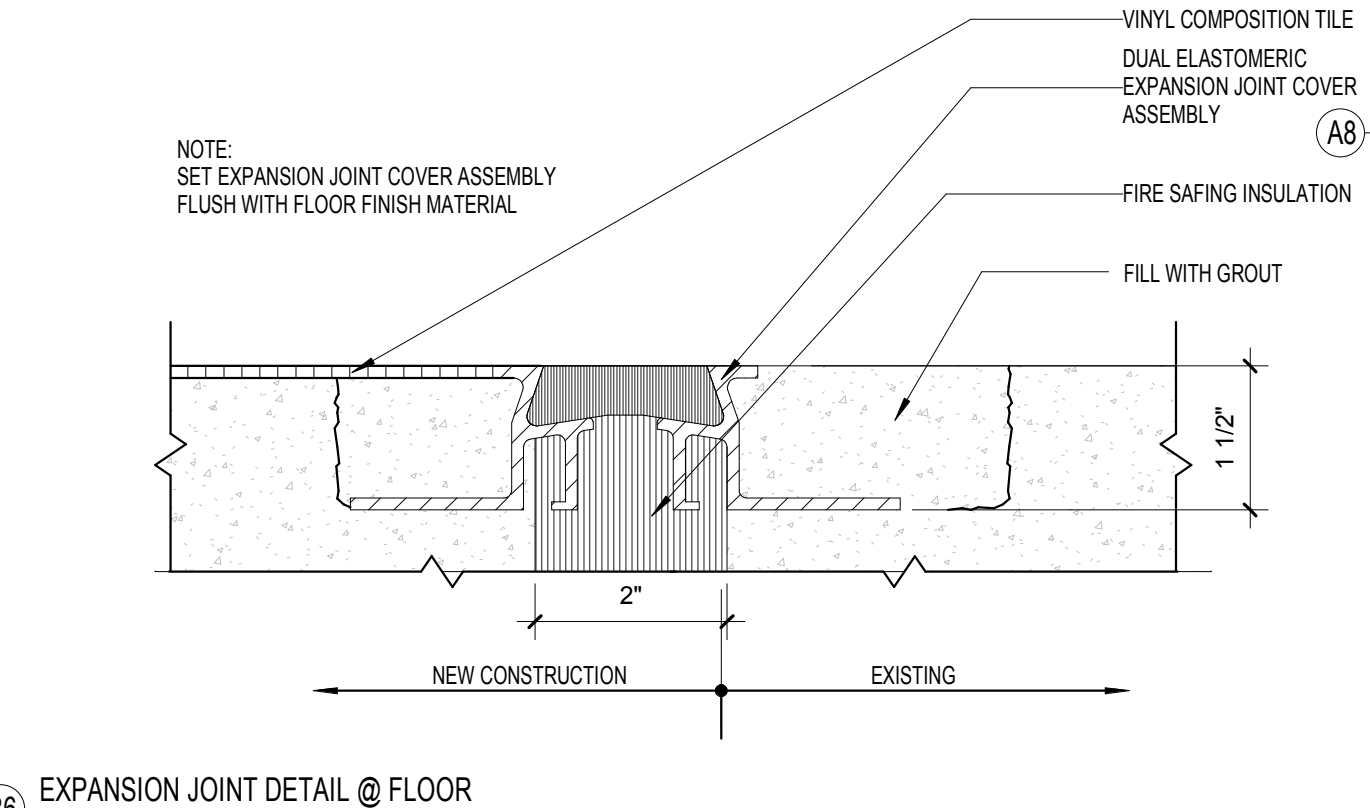
E4 SOFFIT DETAIL  
1 1/2" = 1'-0"



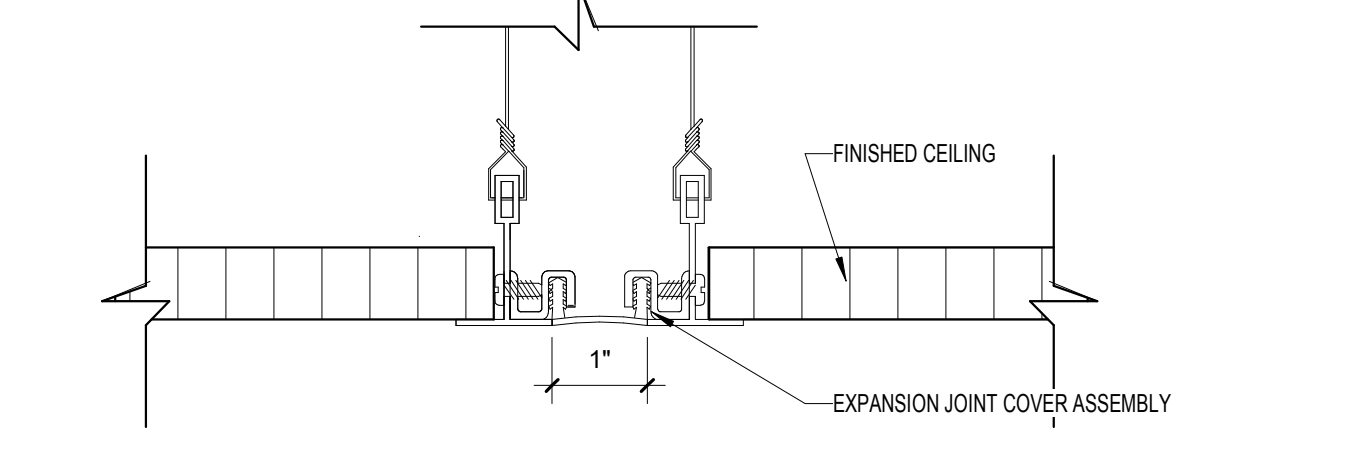
F4 SOFFIT DETAIL 3  
1 1/2" = 1'-0"



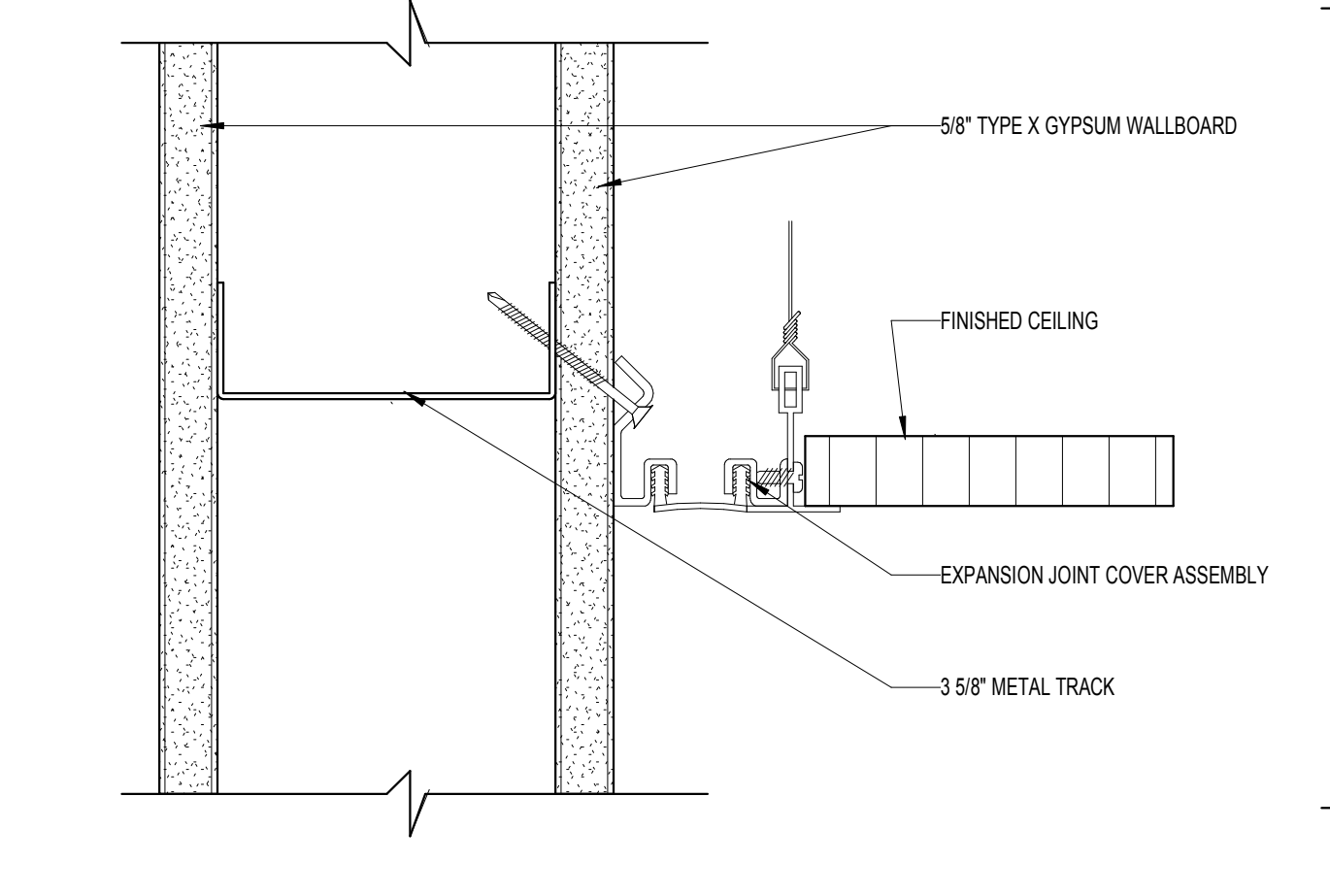
A6 EXPANSION JOINT DETAIL PLAN - AJS  
6" = 1'-0"



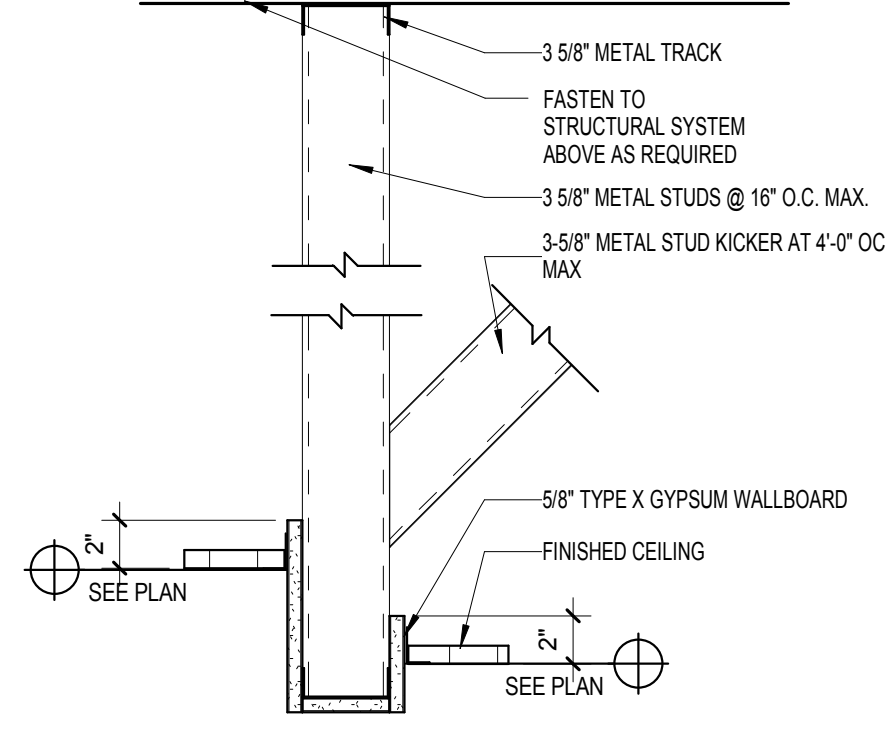
B6 EXPANSION JOINT DETAIL @ FLOOR  
6" = 1'-0"



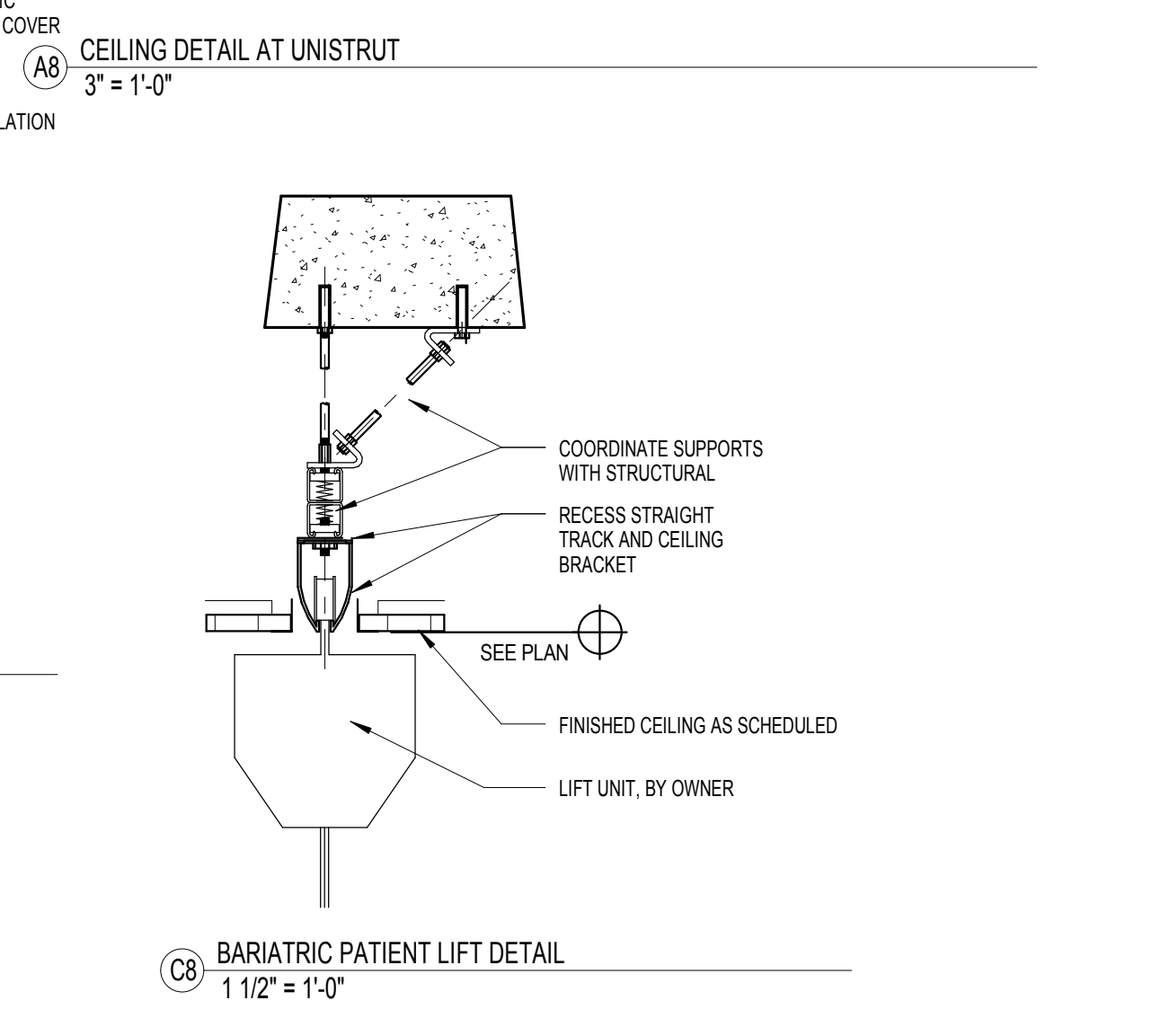
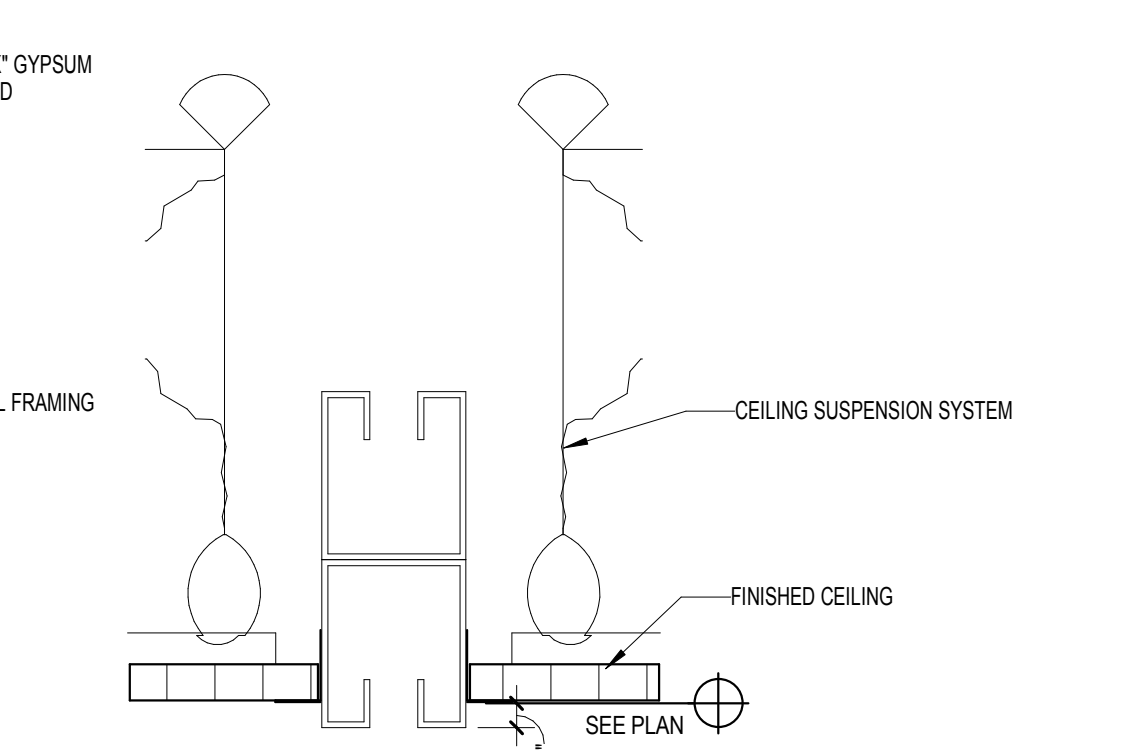
C6 EXPANSION JOINT DETAIL IN CEILING  
6" = 1'-0"



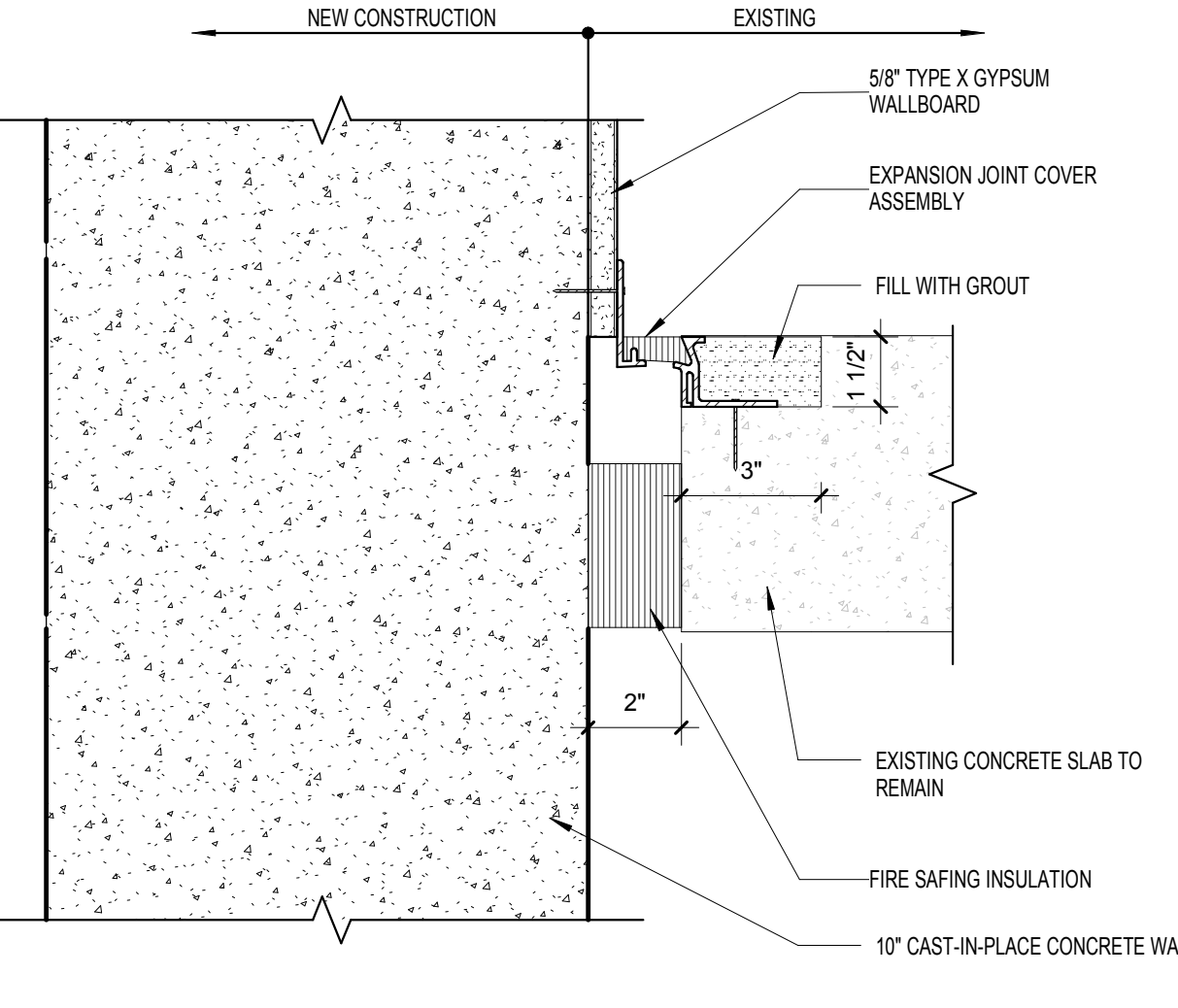
E6 EXPANSION JOINT DETAIL AT PERIMETER CEILING  
6" = 1'-0"



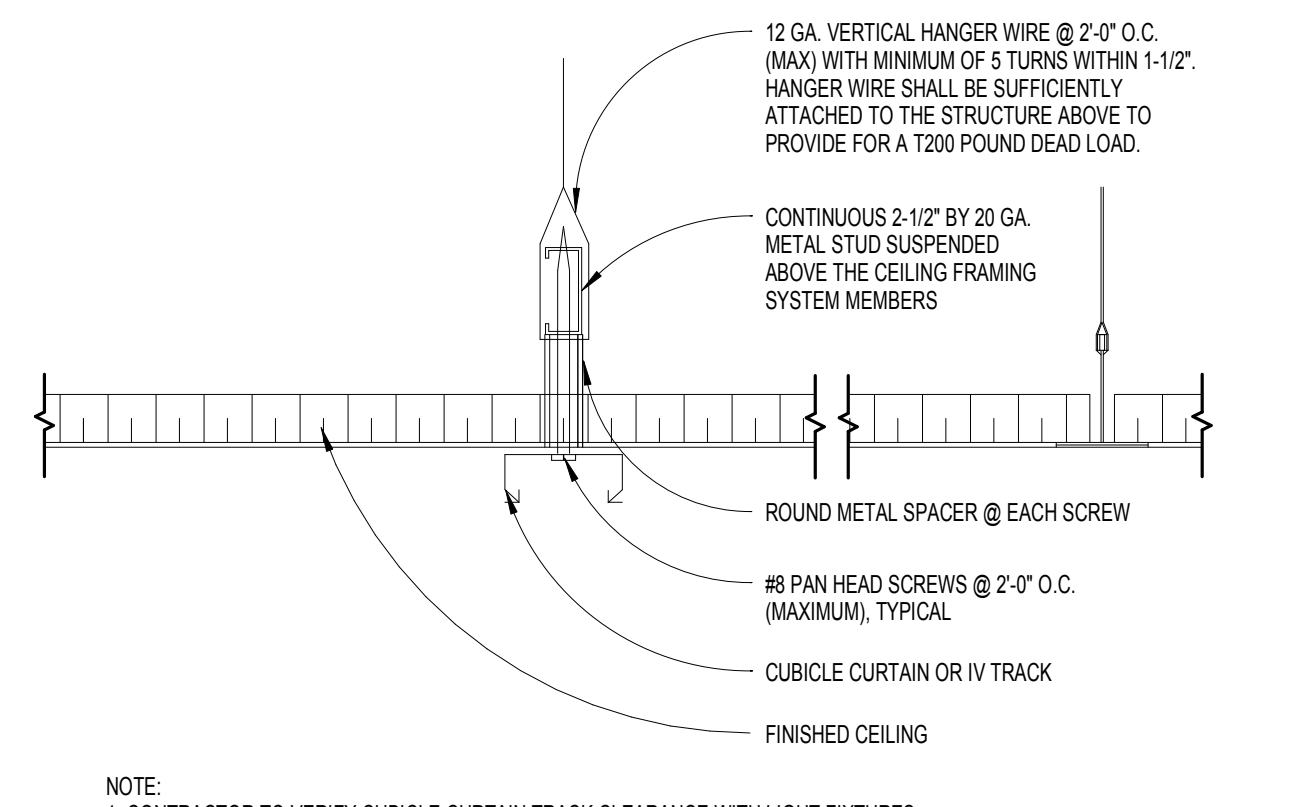
F6 SOFFIT DETAIL 4  
1 1/2" = 1'-0"



C8 BARIATRIC PATIENT LIFT DETAIL  
1 1/2" = 1'-0"



E8 EXPANSION JOINT DETAIL @ CONCRETE WALL  
3" = 1'-0"



NOTE:  
1. CONTRACTOR TO VERIFY CUBICLE CURTAIN TRACK CLEARANCE WITH LIGHT FIXTURES, MECHANICAL DIFFUSERS AND SPRINKLER HEADS  
2. PROVIDE SUFFICIENT HANGING SUPPORT TO THE CEILING TRACK AND/OR WOOD BLOCKING SO THE CUBICLE CURTAIN TRACK WILL SUPPORT THE WEIGHT REQUIRED IN THE SPECIFICATIONS.

F8 ATTACHMENT OF CUBICLE CURTAIN TRACK  
1 1/2" = 1'-0"

FULLY SPRINKLERED  
NOTE: SEE SHEET AE-002 FOR DEDUCT ALTERNATES ISSUED FOR BID

		<div>CONSULTANTS:</div> <div><div><div>Project Manager</div><div>BRAY MOONEY CONSULTING</div><div>410 E. 21 STREET CHESTER, PA. 19013 Tel: (610) 872-3716</div></div><div><div>Architect</div><div>ARRAY HEALTHCARE FACILITIES SOLUTIONS</div><div>2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA. 19406 Tel: (610) 279-5599</div></div><div><div>Structural Engineer</div><div>WZG, STRUCTURAL CONSULTING ENGINEERS</div><div>P.O. BOX 24 40 LITTLE ROAD ZIEGLERVILLE, PA. 19422 Tel: (610) 287-3194</div></div><div><div>MEP/FP Engineer</div><div>APOGEE CONSULTING GROUP</div><div>7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC. 27606 Tel: (919) 858-7420</div></div><div><div>Civil Engineer</div><div>GUIDON DESIGN</div><div>2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 600-6388</div></div><div><div>Fire Protection Consultant</div><div>HARRINGTON GROUP</div><div>7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC. 28227 Tel: (704) 531-9077</div></div><div><div>Cost Estimator</div><div>BRAY MOONEY CONSULTING</div><div>410 E. 21 STREET CHESTER, PA. 19013 Tel: (610) 872-3716</div></div><div><div>Aquatic Consultant</div><div>ATLANTIC AQUATIC ENGINEERING</div><div>1823 DEEP RUN ROAD PIERSVILLE, PA. 18947 Tel: (215) 786-0409</div></div><div><div>Associate Architects</div><div>W. COOK ARCHITECTS</div><div>1251 ROMANSVILLE ROAD COATESVILLE, PA. 19320 Tel: (610) 383-4460</div></div></div>								<div>PROJECT MANAGER:</div> <div><div>Bray Mooney Consulting</div></div>		<div>Project Number</div> <div>3627</div>	<div>Scale</div> <div>As indicated</div>	<div>Drawing Title</div> <div>INTERIOR DETAILS</div>		<div>Project Title</div> <div>RENOVATE BUILDING 69</div>		<div>VA Project Number</div> <div>542-CSI-203</div>	<div>Office of Facilities Management</div> <div><div></div><div>Department of Veterans Affairs</div></div>
				<div>Approved: Project Director</div>		<div>Location</div> <div>1400 Black Horse Hill, Coatesville, PA</div>		<div>Building Number</div> <div>69</div>	<div>Drawing Number</div> <div>AE612</div>										
						<div>Date</div> <div>03-29-13</div>	<div>Checked</div> <div>TN</div>	<div>Drawn</div> <div>BG</div>	<div>Dwg. 32 of 86</div>										
<div>Revisions</div>	<div>Date</div>																		



C1 SHOWER SEAT DETAIL - PLAN  
3" = 1'-0"

C3 SHOWER SEAT DETAIL - SECTION  
3" = 1'-0"

(F1) TYPICAL SHOWER PLAN DETAIL  
1 1/2" = 1'-0"

A6 GRAB BAR DETAIL AT TILED WALL  
6" = 1'-0"

(A8) SHOWER HEAD PENETRATION DETAIL  
3" = 1'-0"

**B8** SHOWER CONTROL VALVE PENETRATION DETAIL  
3" = 1'-0"

(D7) FOLDED CORNER AT RECESSED SHOWER  
1 1/2" = 1'-0"

(F6) HANDICAPPED SHOWER SECTION @ EXISTING CONSTRUCTION  
1 1/2" = 1'-0"

## CONSULTANTS:

<u>Project Manager</u>	<u>Architect</u>	<u>Structural Engineer</u>	<u>MEP/FE Engineer</u>	<u>Civil Engineer</u>	<u>Fire Protection Consultant</u>	<u>Cost Estimator</u>	<u>Aquatic Consultant</u>	<u>Associate Architects</u>
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## PROJECT MANAGER:



Project Number	3627
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3627

Scale	As indicated
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As indicated

Drawing Title

## SHOWER DETAILS

Approved: Project Director

Project Title	
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RENOVATE BUILDING 69

	Location

Date 03-29-13

Checked
TN

Drawn	BG
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VA Project Number

Building Number

	Drawing Number

AE613

Dwg. 34 of 86

Office of  
Facilities  
Management

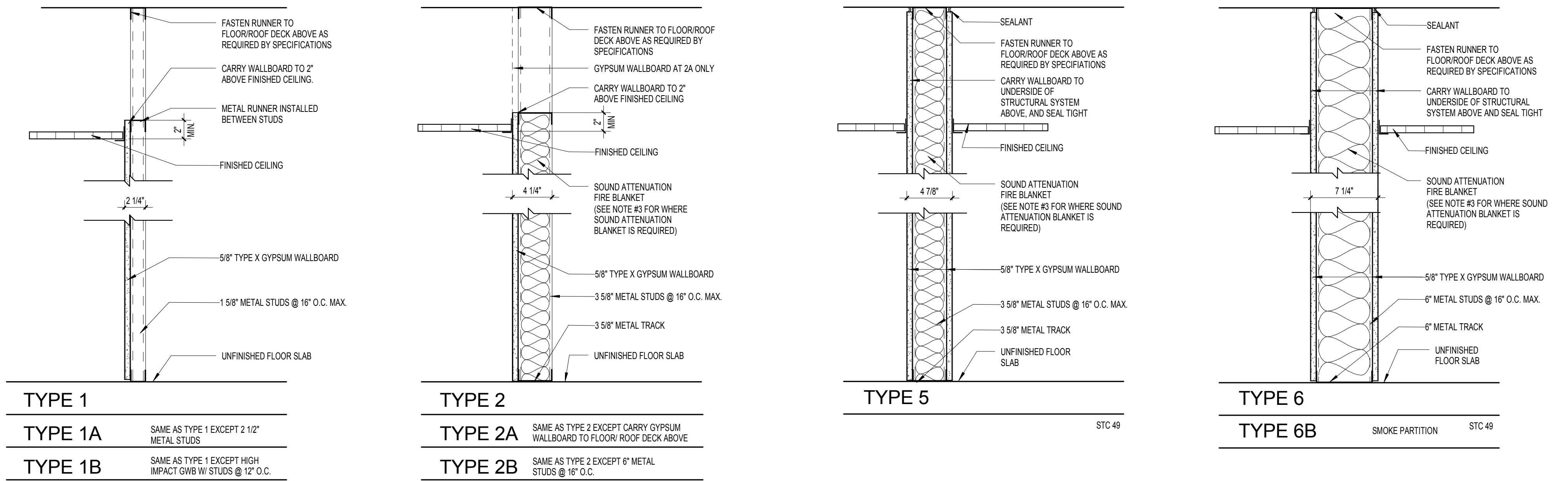


FULLY SPRINKLERED

NOTE: SEE SHEET AE-002 FOR DEDUCT ALTERNATES ISSUED FOR BID



three inches = one foot  
one and one half inches = one foot  
one inch = one foot  
three quarters inch = one foot  
one half inch = one foot  
three eighths inch = one foot  
one quarter inch = one foot  
one eighth inch = one foot

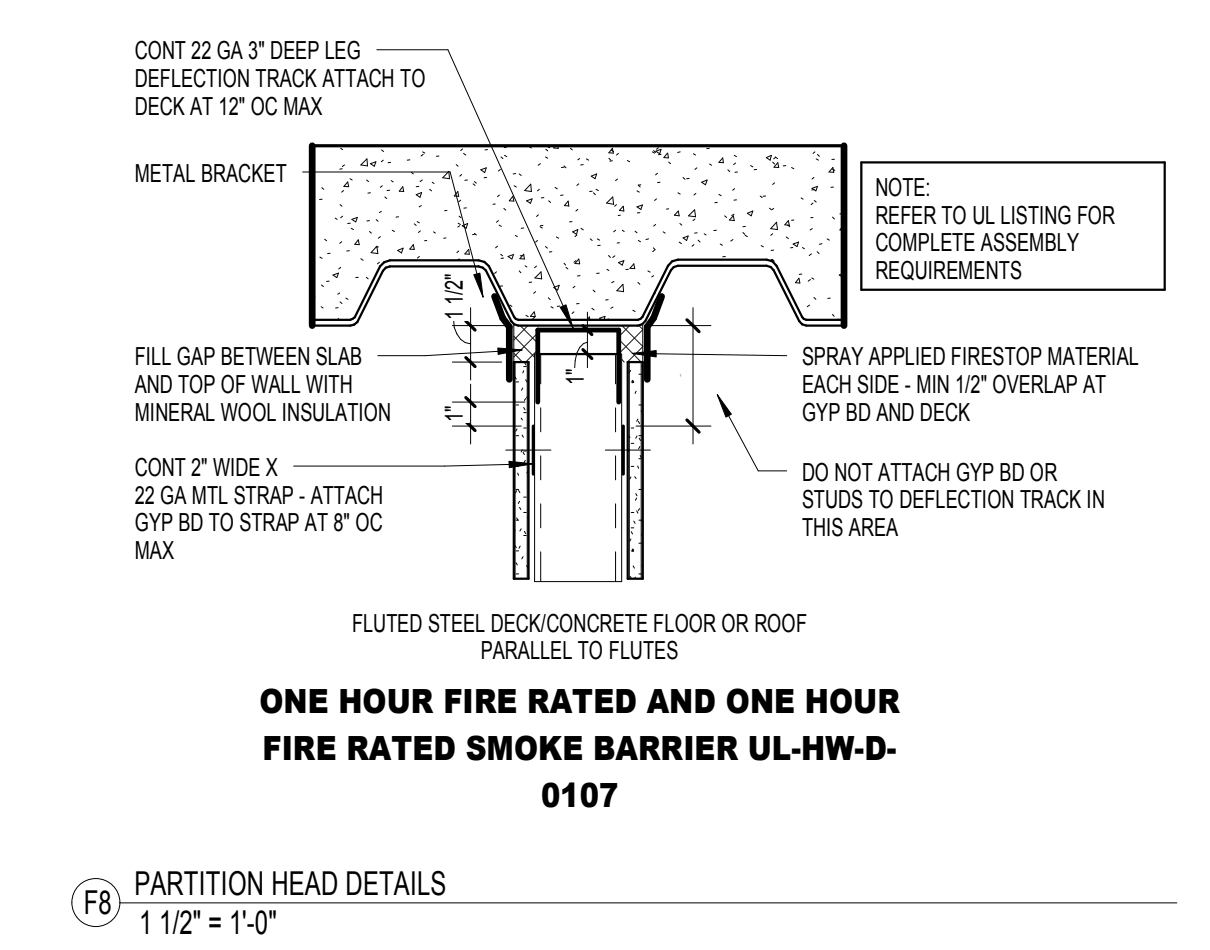
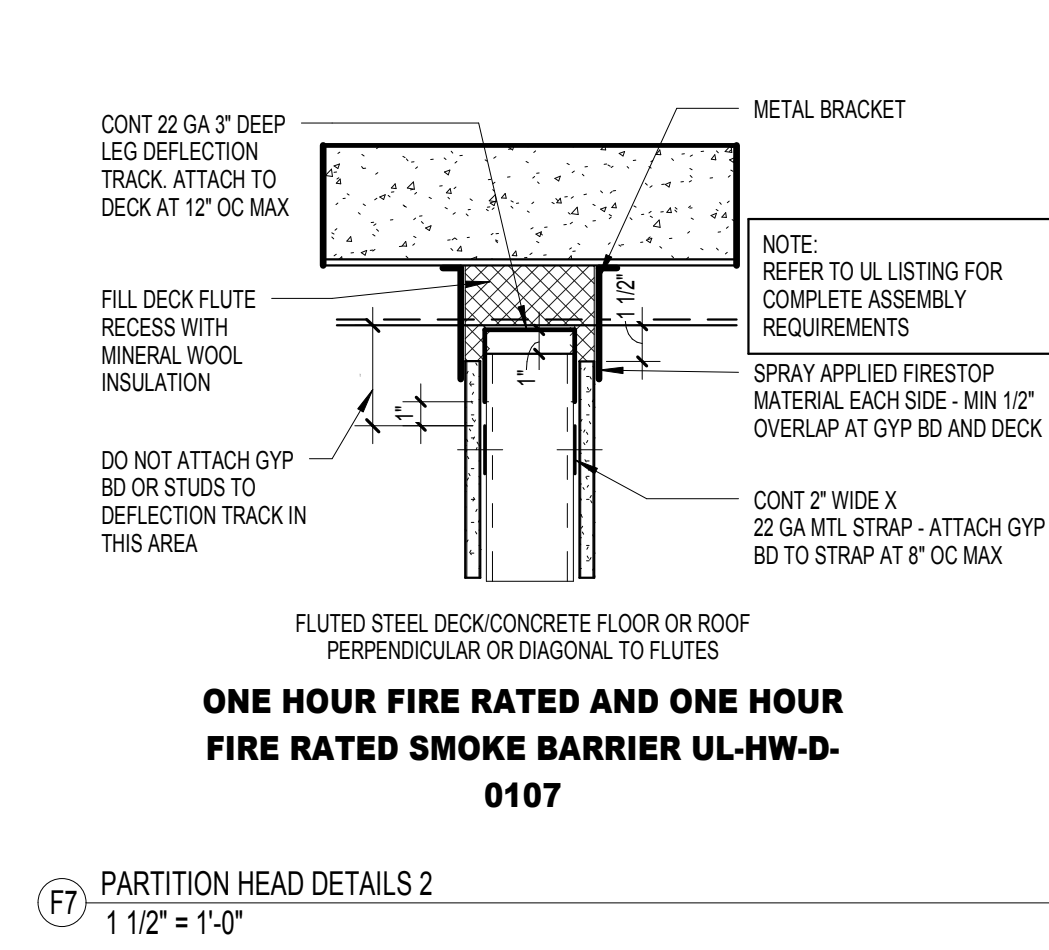
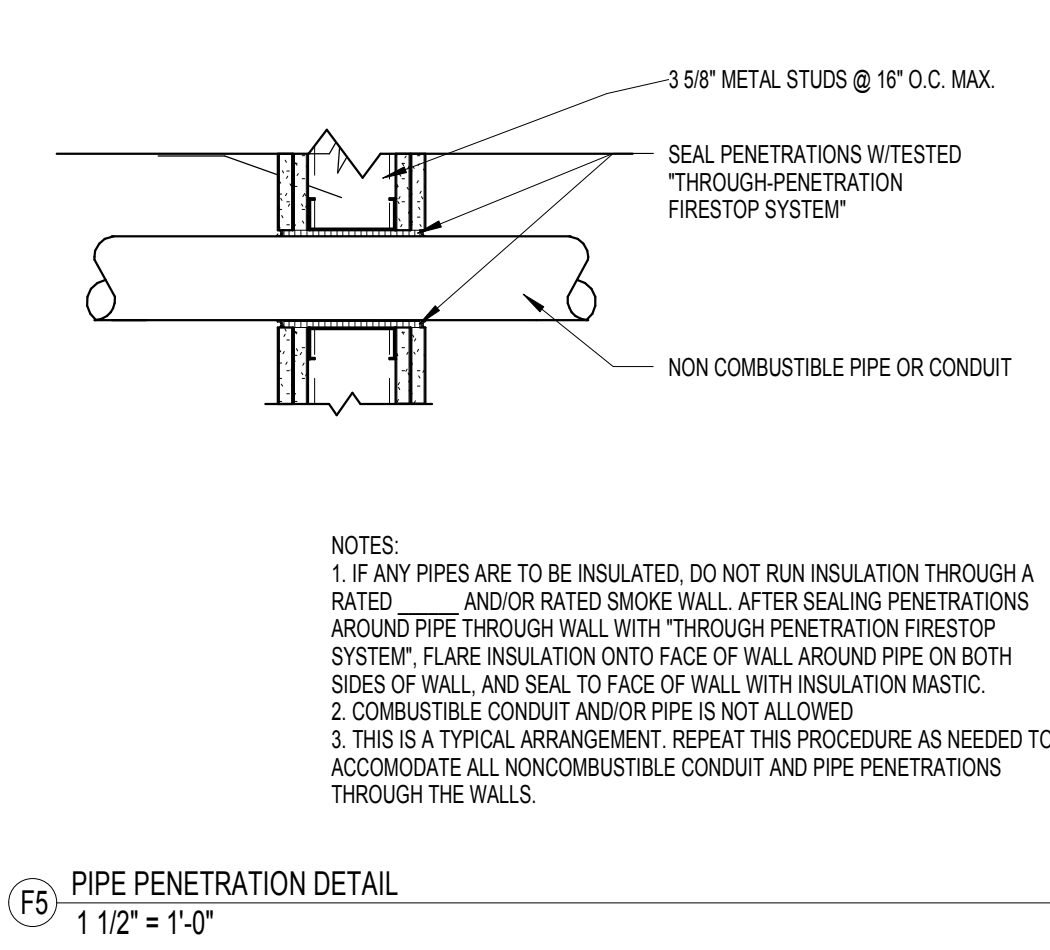
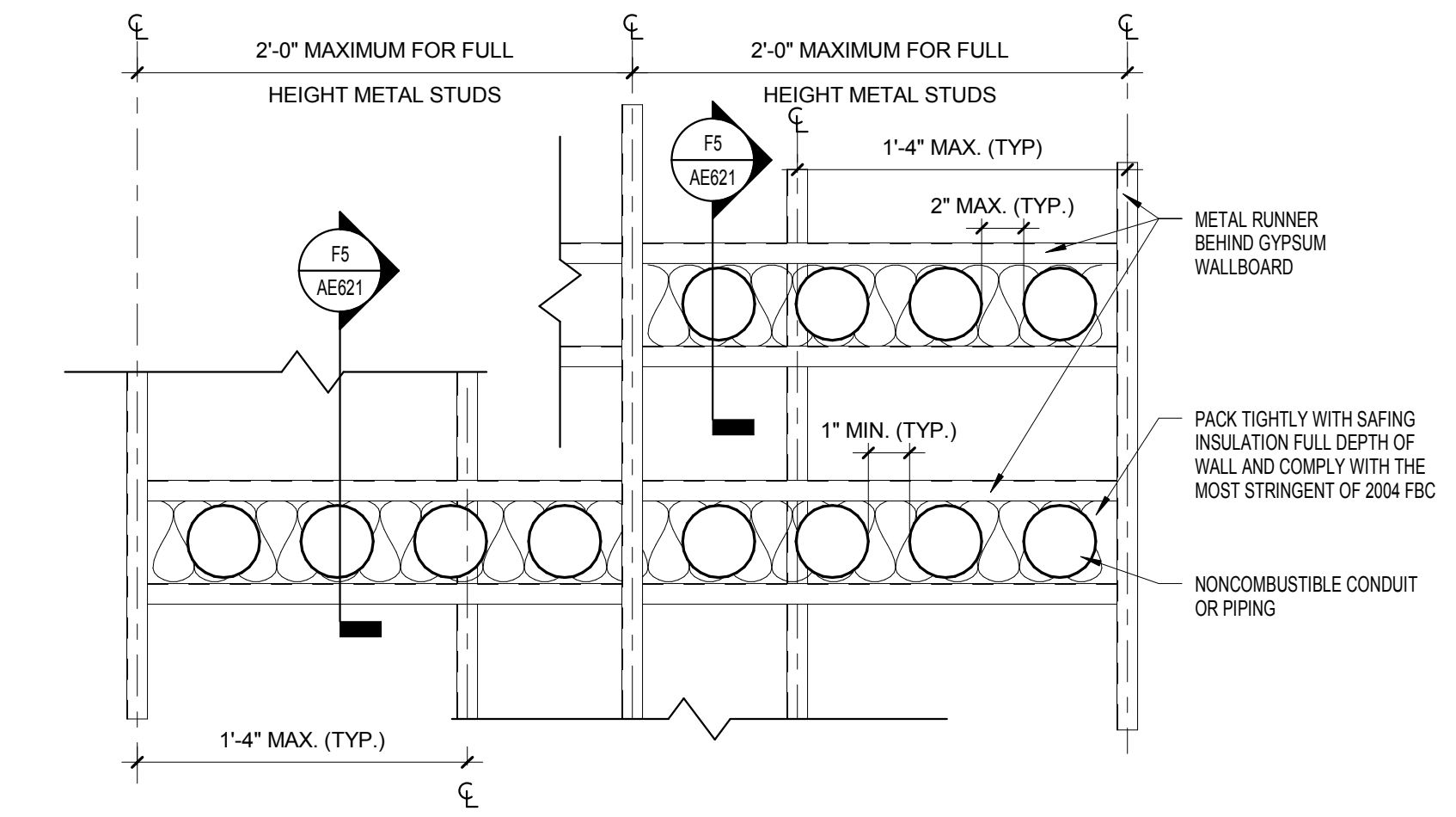
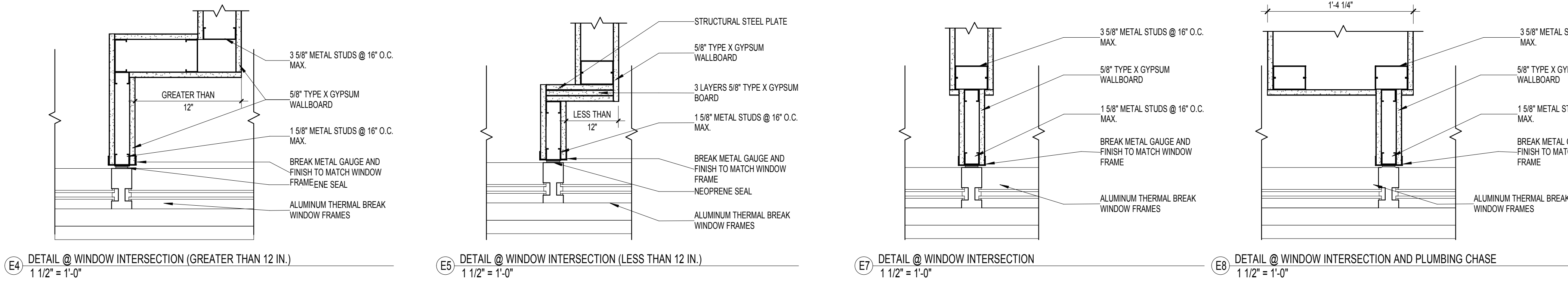
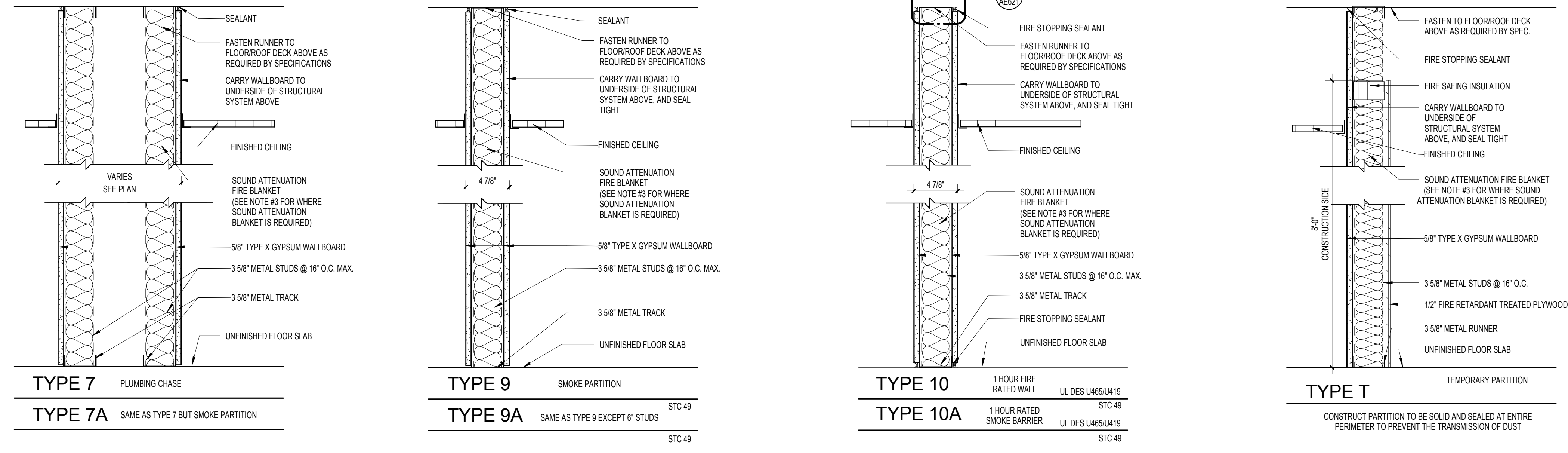


**EXISTING PARTITION TYPE LEGEND**

EXISTING PARTITION TO REMAIN WITH ONE HOUR FIRE RATING. CONTRACTOR TO INSPECT AND SURVEY EXISTING CONDITION OF PARTITION AND PERFORM ALL NECESSARY WORK REQUIRED TO ACHIEVE THE FIRE RATING FROM FLOOR TO STRUCTURE ABOVE. CONTRACTOR TO USE MATERIALS IDENTICAL TO EXISTING MATERIALS OR MATERIALS WHOSE INSTALLED PERFORMANCE WILL EQUAL OR SURPASS THAT OF EXISTING MATERIALS.

**TYPE A**  
EXIST. 1 HOUR FIRE RATED PARTITION

- PARTITION TYPES GENERAL NOTES**
- ALL FIRE RATED AND SMOKE BARRIER PARTITIONS MUST BE INSTALLED PER THEIR UL DESIGN NUMBERS.
  - INSTALL FIRE SEALANT AROUND THE ENTIRE PERIMETER TO PREVENT THE PASSAGE OF SMOKE IN ALL RATED AND SMOKE PARTITIONS.
  - INSTALL SOUND ATTENUATION BLANKET IN ALL PARTITIONS THAT FORM ANY PART OF THE ENCLOSURE OF THE FOLLOWING ROOMS: PATIENT ROOMS, TOILET ROOMS, EXAM ROOMS, TREATMENT ROOMS, OFFICES AND MECHANICAL ROOMS. THESE PARTITIONS SHALL HAVE 3/4" FIBERGLASS BATT SOUND ATTENUATION BLANKETS AND MEET MINIMUM SOUND TRANSMISSION RATING OF STC 45. USE ACOUSTICAL SEALANT AROUND THE ENTIRE PERIMETER ON NON RATED PARTITIONS.
  - REPLACE 5/8" GYPSUM WALLBOARD WITH 5/8" DENS-SHIELD IN ALL AREAS TO RECEIVE CERAMIC TILE. SKIM COAT ENTIRE SURFACE NOT COVER BY TILE.
  - REPLACE 5/8" GYPSUM WALLBOARD WITH 5/8" MOISTURE AND MOLD-RESISTANT GYPSUM WALL BOARD ON ALL PLUMBING WALL OTHER THAN THOSE COVERED IN NOTE # 4 ABOVE.
  - FOR HEIGHTS UP TO AND INCLUDING 14'-0" TYPICAL INTERIOR METAL STUDS ARE 20 GA. AT 16" O.C. FOR HEIGHTS ABOVE 14'-0" USE 18 GA. AT 16" O.C. USE DOUBLE 20 GA. STUDS AT DOORS AND BORROWED LIGHT FRAMES. USE DOUBLE 18 GA. STUDS AT ICU SLIDING DOORS AND LEAD LINED DOORS AND BORROWED LIGHT FRAMES.
  - NOTIFY ARCHITECT OF WORK TO BE PERFORMED ON EXISTING PARTITIONS AND PROVIDE PRICING ACCORDING TO UNIT PRICES OUTLINED IN SPECIFICATION SECTION 01220.
  - INSTALL SUPPLEMENTARY FRAMING, BLOCKING, AND BRACING IN PARTITIONS TO SUPPORT FIXTURES, EQUIPMENT SERVICES, HEAVY TRIM, GRAB BARS, TOILET ACCESSORIES, DOOR HARDWARE, FURNISHINGS, OR SIMILAR CONSTRUCTION COMPLY WITH DETAILS INDICATED AND WITH RECOMMENDATIONS OF "GYPSUM CONSTRUCTION HANDBOOK".
  - WHEN INFILLING OR ABUTTING EXISTING PARTITIONS CONTRACTOR TO ADD AN ADDITIONAL LAYER OF GYPSUM WALLBOARD TO PARTITION TYPE AND/OR SKIM COAT WALL. AS REQUIRED TO PROVIDE A FLUSH SURFACE. THICKNESS OF GYPSUM WALLBOARD AND/OR STUD SIZE TO BE DETERMINED IN FIELD TO PROVIDE A FLUSH SURFACE.
  - EXTEND ALL WALLS TO UNDERSIDE OF STRUCTURE ABOVE. PROVIDE SLIP TRACK AT TOP OR ANOTHER APPROVED METHOD TO ALLOW FOR A 1" DEFLECTION OF THE STRUCTURE.
  - INSTALL LEAD LINING ON SIDE OF PARTITION WHERE RADIATION EMITTING EQUIPMENT IS LOCATED. LEAD LINING IS NOT REQUIRED ABOVE 7'-0" FROM THE FINISHED FLOOR.
  - LEAD LINING THICKNESS TO BE 1/16" UNLESS OTHERWISE NOTED.



TYPICAL MULTIPLE NONCOMBUSTIBLE CONDUIT OR PIPE PENETRATION THROUGH RATED FIRE WALLS AND/OR RATED SMOKE WALLS

PIPE PENETRATION DETAIL

PARTITION HEAD DETAILS 2

PARTITION HEAD DETAILS

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<b>Revisions</b>									
<b>Date</b>									

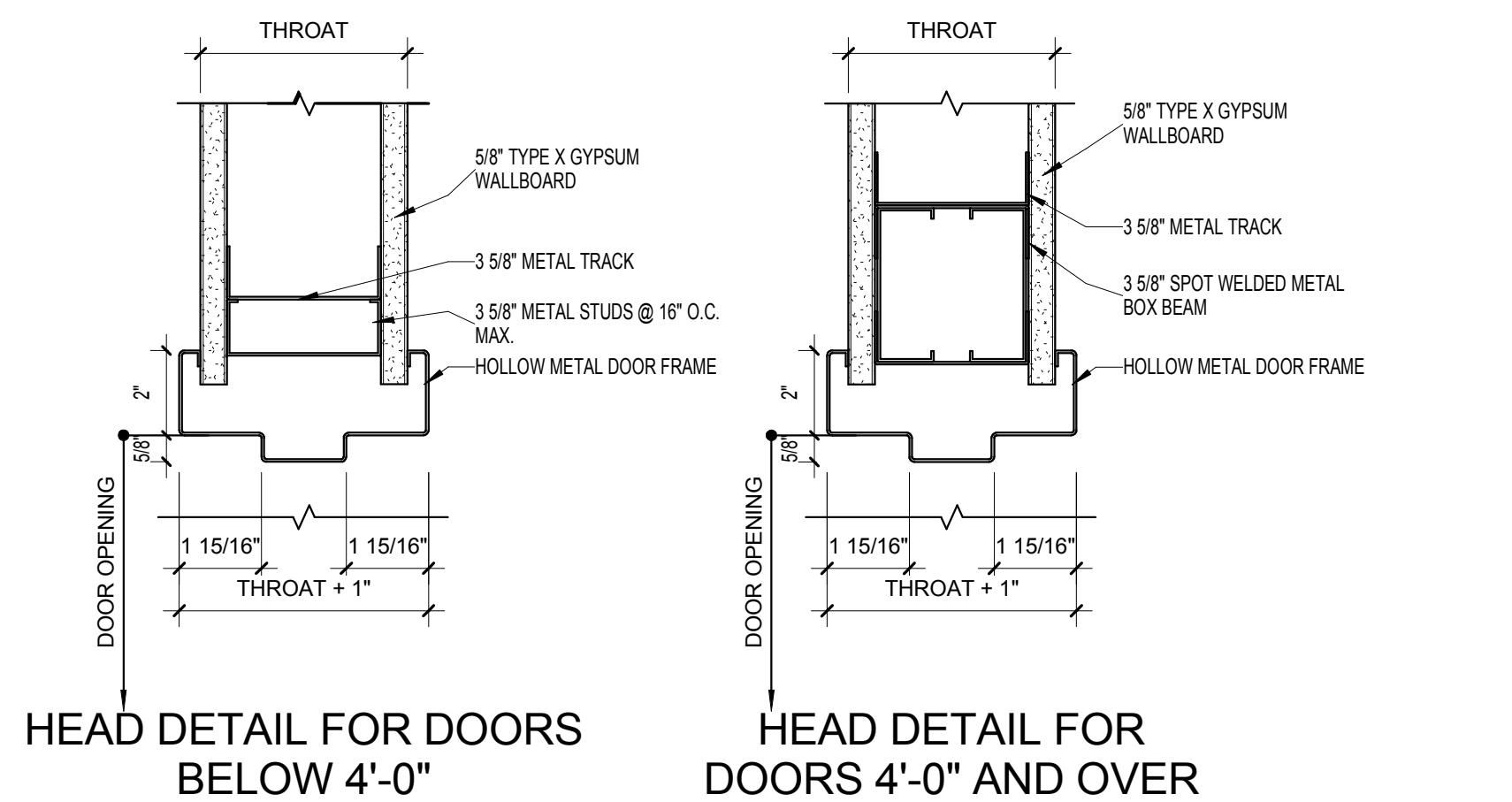
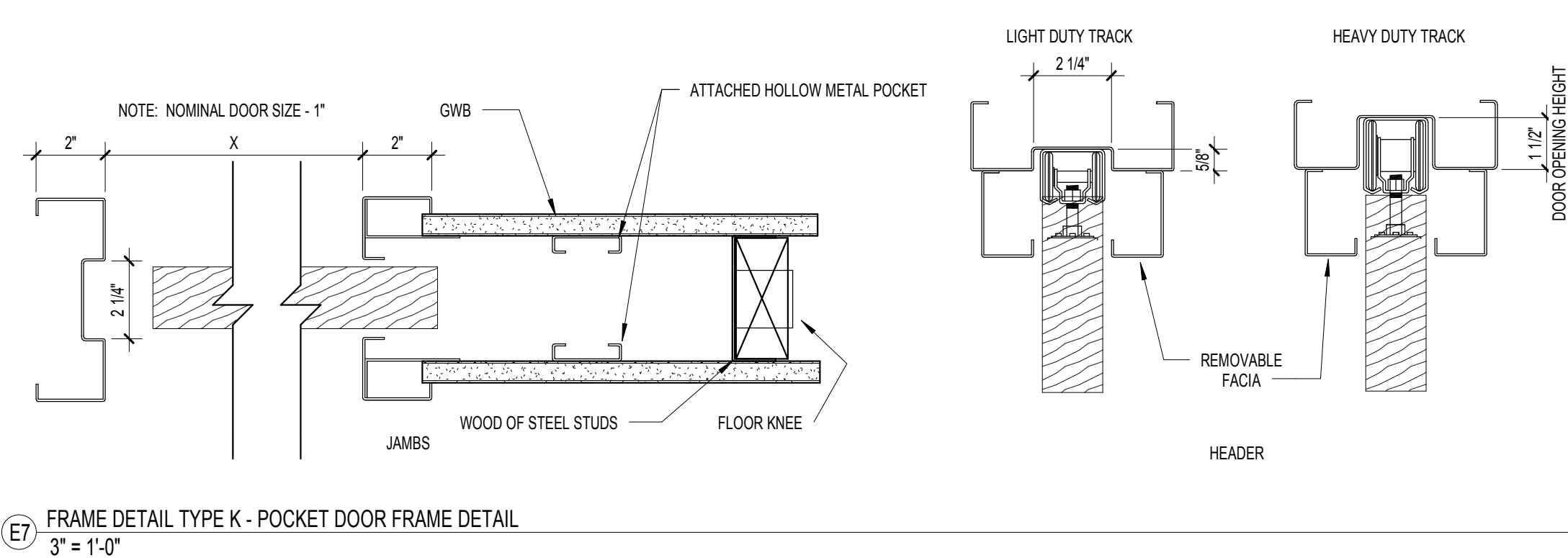
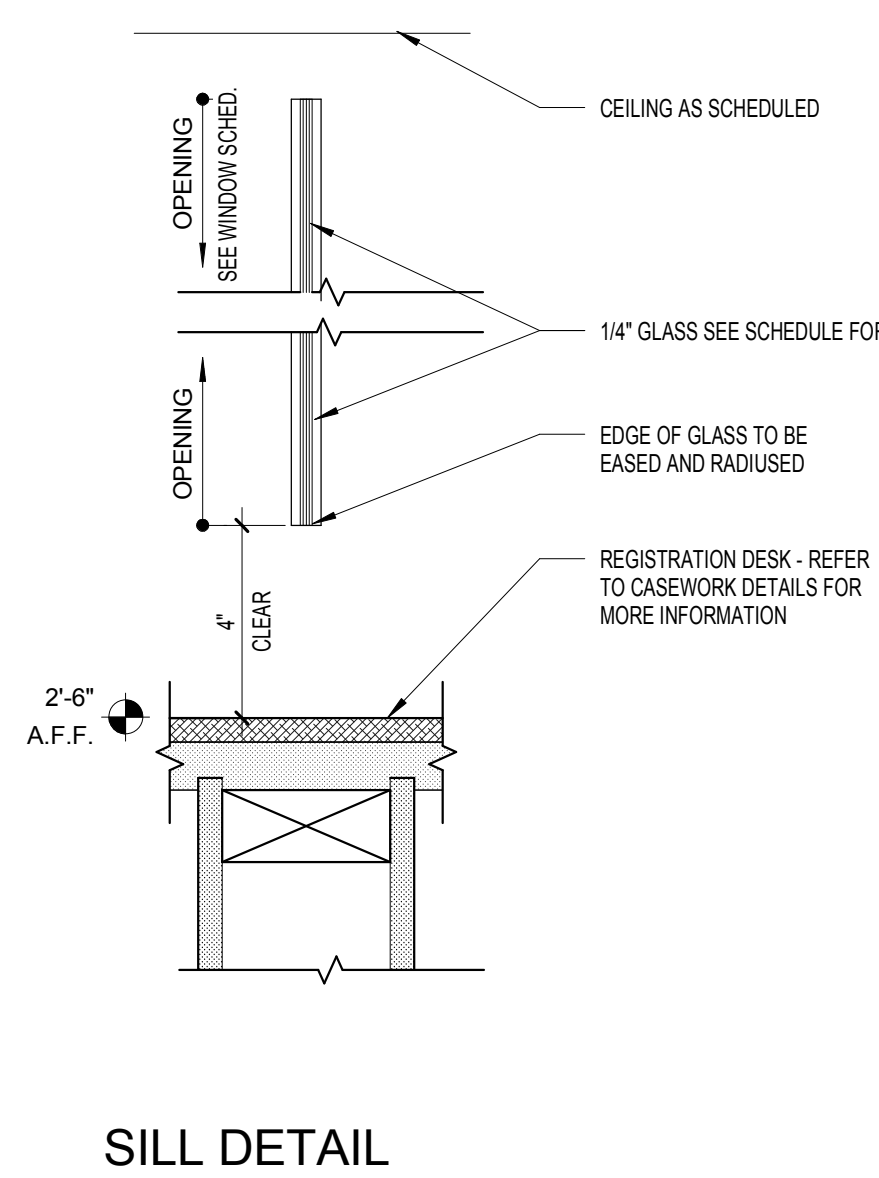
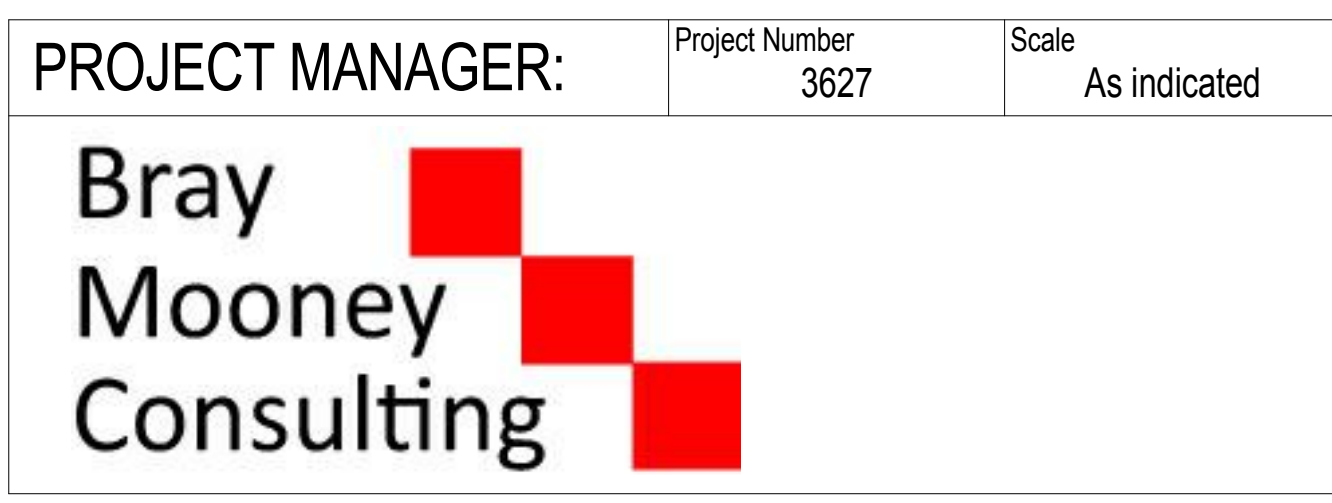
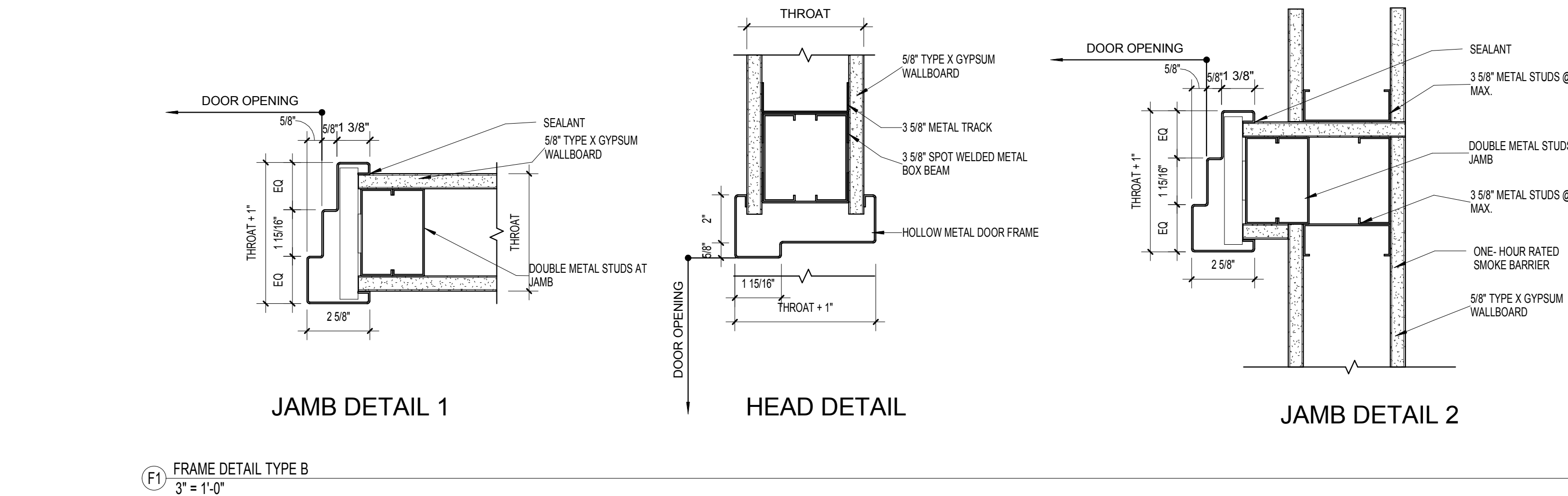
<b>PROJECT MANAGER:</b>		Project Number	3627	Scale	As indicated
<b>Bray Mooney Consulting</b>					
<b>Drawing Title</b>		PARTITION TYPES			
<b>Approved: Project Director</b>					

<b>Project Title</b>		VA Project Number	542-CSI-203
		Building Number	69
<b>Location</b>		1400 Black Horse Hill, Coatesville, PA	
<b>Date</b>	03-29-13	<b>Checked</b>	TN
<b>Drawn</b>	BG	<b>Dwg.</b>	35 of 86


<b>Office of Facilities Management</b>		<b>Drawing Number</b>	
		AE621	

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NOTE: SEE SHEET AE-002 FOR DEDUCT ALTERNATES ISSUED FOR BID



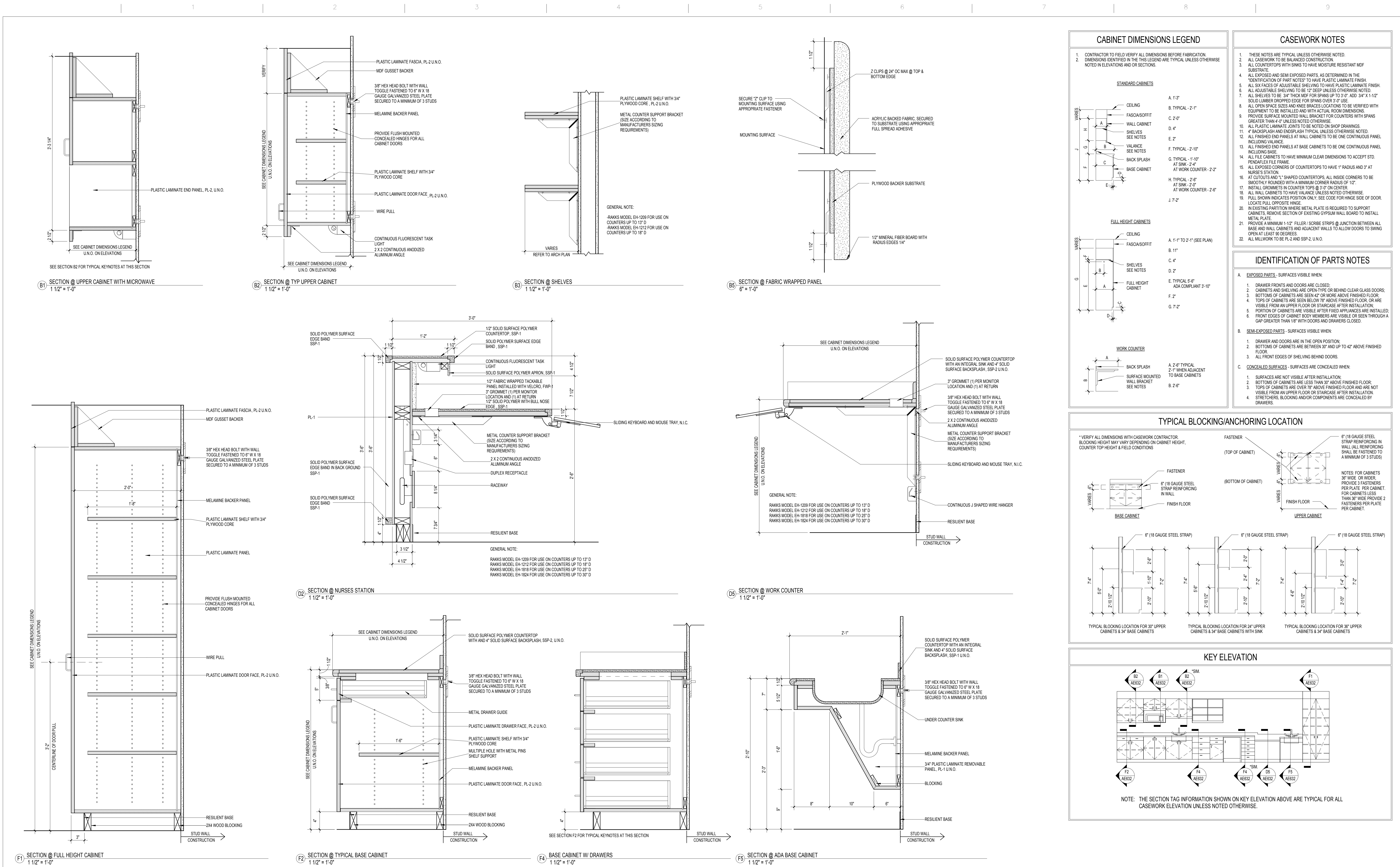


NOTE: SEE SHEET AE-002 FOR DEDUCT ALTERNATES

Project Title <b>RENOVATE BUILDING 69</b>			VA Project Number <b>542-CSI-203</b>		<div>Office of Facilities Management</div> <div>  <div>Department of Veterans Affairs</div> </div>
			Building Number <b>69</b>		
Location <b>1400 Black Horse Hill, Coatesville, PA</b>			Drawing Number <b>AE623</b>		
Date <b>03-29-13</b>	Checked <b>TN</b>	Drawn <b>BG</b>	Dwg. 36 of 86		



three inches = one foot  
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one eighth inch = one foot



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PROJECT MANAGER:

Project Number 3627

Scale As indicated

Drawing Title CASEWORK DETAILS

Approved: Project Director

Project Title RENOVATE BUILDING 69

Location 1400 Black Horse Hill, Coatesville, PA

Date 03-29-13

Checked TN

Drawn BG

VA Project Number 542-CSI-203

Building Number 69

Drawing Number AE632

Dwg. 37 of 86

Office of Facilities Management

Department of Veterans Affairs

NOTE: SEE SHEET AE-002 FOR DEDUCT ALTERNATES ISSUED FOR BID

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VA FORM DB-6231, OCT 1978



A

B

C

D

E

F

G

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MEP/FP Engineer  
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Civil Engineer  
GUIDON DESIGN

Fire Protection Consultant  
HARRINGTON GROUP

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Tel: (610) 383-4460

PROJECT MANAGER:



Project Number  
3627

Scale

Drawing Title

SCHEDULES - DOOR/BORROWED LIGHT

Approved: Project Director

Project Title

RENOVATE BUILDING 69

Location

1400 Black Horse Hill, Coatesville, PA

Date

03-29-13

Checked

TN

Drawn

BG

VA Project Number  
542-CSI-203

Building Number  
69

Drawing Number

AE701

Dwg. 38 of 86

Office of  
Facilities  
Management



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NOTE: SEE SHEET AE-002 FOR DEDUCT ALTERNATES ISSUED FOR BID

DOOR										DOOR SCHEDULE									
DOOR #	TYPE	SIZE			MATL	FIN	GLAZ	FRAME			DETAIL NUMBER	HARDWARE	UL RATING	ALTERNATE NO.		Comments			
		WD	HGT	THK				TYPE	MATL	FIN									
000	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	E2	0010	-			DOOR TO BE 3/4" UNDERCUT			
100A	BB	6'-0"	7'-0"	1 3/4"	SCV	WTF	FRG	4	HM	MP	F1	0008	-						
101	EE	6'-0"	7'-0"	1 3/4"	SCV	WTF	CTG	3	HM	MP	F6	0009	-						
102	E	3'-6"	7'-0"	1 3/4"	SCV	WTF	CTG	1	HM	MP	F6	0007	-						
103	E	3'-6"	7'-0"	1 3/4"	SCV	WTF	CTG	1	HM	MP	F6	0007	-						
104	E	3'-6"	7'-0"	1 3/4"	SCV	WTF	CTG	1	HM	MP	F6	0007	-						
105	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0010	-						
106A	A	3'-6"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0004	-			DOOR TO BE 3/4" UNDERCUT			
106B	A	3'-6"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0004	-			DOOR TO BE 3/4" UNDERCUT			
107	MM	6'-2"	7'-11"	1 3/4"	AL	AL	CTG	5	AL	AL	C2	0011	-						
109	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0007	-						
110	BB	6'-0"	7'-0"	1 3/4"	SCV	WTF	FRG	4	HM	MP	F1	0012	-						
111	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0007	-						
112	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0007	-						
113	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0007	-						
114	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0022	45M			DOOR TO BE 3/4" UNDERCUT			
115	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0007	-						
116	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0007	-						
117	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0007	-						
118	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0007	-						
119	BB	6'-0"	7'-0"	1 3/4"	SCV	WTF	CTG	3	HM	MP	F6	0013	-						
121	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	E2	0014	45M						
122	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0015	-	8					
122A	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0042	-			DOOR TO BE 3/4" UNDERCUT			
123	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0016	-			DOOR TO BE 3/4" UNDERCUT			
124A	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0017	45M						
124B	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0043	45M						
125	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0043	45M						
126	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0018	-						
127	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0019	-						
128	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0007	-						
129	A	4'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0020	-						
131	A	4'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0021	45M						
133A	AA	6'-0"	7'-0"	1 3/4"	SCV	WTF		3	HM	MP	F6	0023	-						
134	MM	5'-0 1/32"	7'-8"	1 3/4"	AL	AL	CTG	5	AL	AL	C2	0024	-			KEYPAD LOCK FOR DEDUCT ALTERNATE #6			
136	BB	7'-0"	7'-0"	1 3/4"	SCV	WTF	FRG	3	HM	MP	F6	0025	-						
142	A	6'-0"	7'-0"	1 3/4"	HM	MP		1	HM	MP	F6	0034	-						
201	A	4'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0026	-						
203	A	4'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0045	-						
204	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0019	-						
301	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0015	-						
302	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0007	-						
303	P	3'-6"	7'-0"	1 3/4"	SCV	WTF		7	HM	MP	F6	0028	-						
304	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	304	-						
401	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0007	-	10					
402	M	3'-4 9/32"	7'-8"	1 3/4"	AL	AL	CTG	5	AL	AL	C2	0029	-						
402B	A	4'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0046	-	10					
403	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0005	-	10		DOOR TO BE 3/4" UNDERCUT			
404	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0005	-			DOOR TO BE 3/4" UNDERCUT			
405	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0007	-	10					
406	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0007	-	10					
407	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0007	-	10					
408	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0007	-	10					
409	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0007	-	10					
411	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0007	-	10					
415	M	2'-11 31/32"	7'-7"	1 3/4"	AL	AL	CTG	5	AL	AL	C2	0030	-						
416	F	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0031	-	10		DUTCH DOOR			
416A	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0032	45M	10					
416B	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0022	45M						
416C	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0022	45M	10					
501	AA	7'-0"	7'-0"	1 3/4"	SCV	MP		3	HM	MP	F6	0044	-						
503A	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0007	-	7					
503B	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0047	-						
600A	AA	7'-0"	7'-0"	1 3/4"	SCV	MP		3	HM	MP	F6	0033	-						
600B	M	7'-0"	7'-0"	1 3/4"	AL	AL	TL	5	AL	AL	C2 - SIM	0025	-						
600C	M	3'-0"	7'-0"	1 3/4"	AL	AL	MTL												
601A	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0004	-			DOOR TO BE 3/4" UNDERCUT			
601C	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0005	-						
602	A	3'-6"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0035	-			45M			
603	M	3'-0"	7'-0"	1 3/4"	AL	AL	TL	5	AL	AL	C2 - SIM	0036	-						
604	A	3'-6"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0007	-			DOOR TO BE 3/4" UNDERCUT			
604A	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0037	-						
604B	A	3'-6"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0007	-						
604C	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0006	-						
605A	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0004	-			DOOR TO BE 3/4" UNDERCUT			
605B	A	3'-0"	7'-0"	1 3/4"	ALV	ALV		5	ALV	ALV	F6	0005	-			DOOR TO BE 3/4" UNDERCUT			
606A	M	2'-10"	7'-0"	1 3/4"	AL	AL	MTL	5	AL	AL	C2	0048	-			FULL METAL STOREFRONT DOOR TO MATCH POOL ENCLOSURE			
606B	M	3'-0 3/32"	7'-0"	1 3/4"	AL	AL	MTL									FULL METAL STOREFRONT DOOR TO MATCH POOL ENCLOSURE			
701	AA	6'-0"	7'-0"	1 3/4"	SCV	WTF		3	HM	MP	F6	0038	-						
701A	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	E2	0017	45M						
701B	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0018	-						
702	A	4'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0039	-			45M			
703	G	3'-0"	7'-0"	1 3/4"	SCV	WTF	CTG		1	HM	MP	F6	0019	-					
703A	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0043	-			45M			
703B	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0043	-			45M			
801	A	4'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0040	-			DOOR TO BE 3/4" UNDERCUT			
802A	A	3'-6"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0005	-						
802B	A	3'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0037	-						
804	A	4'-0"	7'-0"	1 3/4"	SCV	WTF		1	HM	MP	F6	0022	45M						
905	MM	3'-0"	7'-0"	1 3/4"	SCV	WTF	CTG	5	HM	MP	F6	0019	-						
E107		6'-0"	7'-0"				CTG	3	AL	AL	C2 - SIM	0002.1	-			KEYPAD LOCK			
E119	AA	5'-0"	7'-0"	1 3/4"	HM	MP		5	HM	ALV	E2	0001	-			KEYPAD LOCK			
E134	MM	5'-0"	7'-8"		AL	AL	CTG	1	AL	AL	C2	0002	-	8		KEYPAD LOCK			
E136		3'-4"	7'-0"	1 3/4"	HM	MP			1	HM	MP	C2	0003	-					
T1	AA	5'-0"	7'-0"	1 3/4"	SCV	MP		1	HM	MP	F6	0041	-			REFER TO VIEW F1AE002 FOR LOCATION			



FULLY SPRINKLERED

Office of  
Facilities  
Management





FINISH SCHEDULE

FINISH CONTRACTOR MUST REVIEW ALL SPECIFICATIONS AND DRAWINGS PRIOR TO ORDERING MATERIALS AND COMMENCING FABRICATION AND INSTALLATION. MANY ITEMS ARE LONG-LEAD AND SHOULD BE ORDERED PROMPTLY. LOCATION DESCRIPTIONS ARE FOR REFERENCE ONLY AND ARE NOT INDICATIVE OF EVERY OCCURRENCE OF A PARTICULAR FINISH. REFER TO FINISH PLAN FOR EXACT LOCATIONS.

CEILING

AS MANUFACTURED BY ARMSTRONG WORLD INDUSTRIES, INC.  
SALES REPRESENTATIVE: NANCY MEDO  
PHONE: 215-491-2179

WHEREVER POSSIBLE, GRIDS TO BE CENTERED IN THE ROOM ON THE CENTER LINE OF THE CEILING TILE. INSTALL NO TILE SMALLER THAN 6" WIDE. ALL CEILING GRIDS TO BE ARMSTRONG WORLD INDUSTRIES.  
COLOR: WHITE, U.N.O.

C-1  
STYLE: HEALTH ZONE ULTIMA #1837 OR APPROVED EQUAL  
EDGE PROFILE: BEVELED REGULAR  
DIMENSIONS: 2' x 2' x 3/4"  
GRID: PRELUDE  
COLOR: WHITE  
FOR USE AS THE GENERAL CEILING, U.N.O.

C-2  
STYLE: OPTIMA OPEN PLAN #3354 OR APPROVED EQUAL  
EDGE PROFILE: BEVELED REGULAR  
DIMENSIONS: 2' x 2' x 1"  
GRID: 15/16" SQUARE REGULAR  
COLOR: WHITE

C-3  
GYPSUM WALLBOARD SOFFIT  
COLOR: T8D

NOTE: WHERE THE FASCO OF SOFFITS ALIGNS WITH THE ADJACENT PARTITION, PROVIDE 1/4" FRY REGLET REVEAL TO TERMINATE A MATERIAL OR COLOR. ALL SOFFIT FASCOES ARE TO RECEIVE PAINT, NOT VINYL WALLCOVERING. PLEASE REFER TO THE REFLECTED CEILING PLAN FOR LOCATIONS OF CEILING TILES.

C-4  
STYLE: HEALTH ZONE OPTIMA #3114 OR APPROVED EQUAL  
EDGE PROFILE: SQUARE REGULAR  
DIMENSIONS: 2' x 2' x 1"  
GRID: PRELUDE (MOISTURE AND CHEMICAL RESISTANT)  
COLOR: WHITE  
FOR USE IN POOL AND SHOWER AREAS

C-5  
STYLE: METALWORKS LINEAR - INTERIOR #5402FXWN OR APPROVED EQUAL  
COLOR: EFFECTS WALNUT FXWN  
PERFORATED OPTION: MICROPERFORATED  
PANEL WIDTH: 4"  
EDGE DETAIL: SQUARE WITH EXTENDED FLANGE  
DIMENSIONS: 16" X 4" X 3/8"  
SUSPENSION SYSTEM: #5497 STANDARD CARRIER  
ACCESSORIES: ASSUME ALL ACCESSORIES - PANEL SPLICES, PANEL END CAPS, TRIM MOLDING AND PRESSURE SPRINGS.

PAINT

ALL PAINT AS MANUFACTURED BY: SHERWIN WILLIAMS

NOTE: ALL WALLS TO BE EGGSHELL FINISH, U.N.O. TOILET ROOMS ARE TO BE SEMI-GLOSS WATER BASE EPOXY. ALL TRIM AND FRAMES TO BE SEMI-GLOSS FINISH. METAL PANELS TO BE PAINTED TO MATCH ADJACENT WALL. ALL GWB CEILINGS AND SOFFITS TO BE FLAT FINISH U.N.O. SOFFITS ARE NEVER TO RECEIVE VINYL WALLCOVERING AND FACE AND UNDERSIDE ARE TO BE PAINTED TO MATCH. EXPOSED GELINGS TO RECEIVE TWO PART EPOXY COATING.

PT-1  
COLOR: CANVAS TAN SW7531  
FOR USE AS GENERAL PAINT, U.N.O.

PT-2  
COLOR: OUTERBANKS SW7534  
FOR USE AS DOOR FRAME AND TRIM PAINT, U.N.O.

PT-3  
COLOR: MANOR HOUSE SW7555  
FOR USE AS ACCENT PAINT

PT-4  
COLOR: ARTISAN TAN SW7540  
FOR USE AS ACCENT PAINT

PT-5  
COLOR: HOMESTEAD BROWN SW7515  
FOR USE AS ACCENT PAINT

PT-6  
COLOR: HOMBERG GRAY SW7622  
FOR USE AS ACCENT PAINT

PT-7  
COLOR: HARDWARE SW6172  
FOR USE AS ACCENT PAINT

PT-8  
COLOR: WHITE  
FOR USE AS THE COLOR UNDER THE ENTRANCE CANOPY  
FOR USE ON THE STEEL WITHIN THE POOL

CERAMIC WALL TILE

AS MANUFACTURED BY DALTILE  
SALES REPRESENTATIVE: SUSAN METKA  
PHONE: 484-276-9387

CWT-1  
STYLE: SPARK COLORBODY PORCELAIN OR APPROVED EQUAL  
COLOR: T8D  
DIMENSIONS: 12" x 24" x 3/16"  
GROUT COLOR: T8D  
GROUT WIDTH: 1/8"

CWTB-1  
STYLE: COVE BASE S-300T8 OR APPROVED EQUAL  
COLOR: TO MATCH CWT-1  
DIMENSIONS: 8" X 12"  
GROUT COLOR: TO MATCH CWT-1  
GROUT WIDTH: TO MATCH CWT-1

CWT-2  
STYLE: SPARK COLORBODY PORCELAIN OR APPROVED EQUAL  
COLOR: T8D  
DIMENSIONS: 12" X 2" (SHEET 11-5/8" X 11-5/8")  
GROUT COLOR: T8D  
GROUT WIDTH: 1/8"

RUBBER BASE

AS MANUFACTURED BY MANNINGTON  
SALES REPRESENTATIVE: JESSICA D'ANGELO  
PHONE: 610-675-6599

RB-1  
STYLE: SYNC RUBBER WALL BASE (TYPE TP) OR APPROVED EQUAL  
COLOR: 918 FLAX  
DIMENSIONS: 4 1/4" X 12" COIL  
6" HIN SOILED UTILITY ROOMS AND JANITORS CLOSETS  
SEAL JOINTS BETWEEN TOP OF WALL BASE AND IRREGULAR WALL SURFACES

WALL PROTECTION

AS MANUFACTURED BY C/S ACROVYN  
SALES REPRESENTATIVE: BRAD GLDIN  
PHONE: 610-825-0320

PWP-1  
PLASTIC WALL PROTECTION OR APPROVED EQUAL  
STYLE: 4000 3000 RIGID SHEET  
DIMENSIONS: 4' x 10' SHEET  
SURFACE: SHADOWGRAIN  
COLOR: BEIGE # 103  
JOINTS/TRANSITIONS: COLOR MATCHING CAULK (NO PLASTIC TRIM PIECES)

CG-1  
STYLE: CO-8 CORNER GUARD OR APPROVED EQUAL  
DIMENSIONS: 3-1/2" EGG X FULL HEIGHT  
CO-8M FOR OOD ANGLES  
ANGLE: 90 DEGREES  
DIMENSIONS: 3-1/2" EGG X FULL HEIGHT  
304 STAINLESS ALLOY WITH #4 SATIN FINISH  
MOUNTED WITH CONSTRUCTION ADHESIVE AND STAINLESS STEEL SCREWS

BS-1  
STYLE: FR-225N BUMPER GUARD OR APPROVED EQUAL  
DIMENSIONS: 2-1/4" H X 3/4" D  
ACROVYN 4000 COVER  
TEXTURE: SHADOWGRAIN  
COLOR: BEIGE # 103  
RETAINER: ALUMINUM  
COLOR MATCHING END CAPS

HR-1  
STYLE: P-RWS PLATFORM HANDRAIL OR APPROVED EQUAL  
DIMENSIONS: 6-3/8" H X 3" D  
TOP RAIL WOOD SPECIES: MAPLE  
TOP RAIL WOOD FINISH: 448 WALNUT  
BOTTOM RAIL COLOR: #4 POLISH (3 SIDES)  
BRACKET COLOR: T8D  
MATCHING END CAPS RETURNING TO THE WALL

PLASTIC LAMINATE

AS MANUFACTURED BY FORMICA  
SALES REPRESENTATIVE: SAMANTHA SMITH  
PHONE: 1-800-367-6422

PL-1  
STYLE: LK-1X EBONY OR APPROVED EQUAL  
FINISH: LUXE  
FOR USE AS VERTICAL LAMINATE, U.N.O.

PL-2  
STYLE: 1983-58 PECAN WOODLINE OR APPROVED EQUAL  
FOR USE AS VERTICAL LAMINATE, U.N.O.

SOLID SURFACE POLYMER

AS MANUFACTURED BY MEGANITE  
DISTRIBUTOR: FESSENDEN HALL, INC.  
SALES REPRESENTATIVE: ROSE LEISTER  
PHONE: 609-685-1883

SSP-1  
COLOR: 419 SURFIN SAFARI OR APPROVED EQUAL  
FOR USE AS GENERAL COUNTER TOP, U.N.O.

SSP-2  
COLOR: 501 SAN RAFAEL STONE OR APPROVED EQUAL  
FOR USE IN TOILET ROOMS AND LABORATORY

SSP-3  
SOLID SURFACE POLYMER SINK  
CORIAN 180 SIDE OVERFLOW  
COLOR: T8D  
FOR USE AS TYPICAL TOILET ROOM SINK, U.N.O.

CARPET

AS MANUFACTURED BY SHAW CONTRACT  
SALES REPRESENTATIVE: VICKY MCCONAGHY  
PHONE: 610-299-0852

CPT-1  
STYLE: UNEARTHED 19x38 COLLECTION - 57016 JASPER OR APPROVED EQUAL  
COLOR: 14740 ZIRCON  
TYPE: TILE  
DIMENSIONS: 18" x 36"  
INSTALLATION: HERRINGBONE, U.N.O.  
FOR USE IN LOBBY AND WAITING AREAS

CPT-2  
STYLE: UNEARTHED 19x38 COLLECTION - 57015 AGATE OR APPROVED EQUAL  
COLOR: 14740 ZIRCON  
TYPE: TILE  
DIMENSIONS: 18" x 36"  
INSTALLATION: HERRINGBONE, U.N.O.  
FOR USE IN CORRIDORS AND OFFICES

CPT-3  
STYLE: UNEARTHED 19x38 COLLECTION - 57015 AGATE OR APPROVED EQUAL  
COLOR: 14740 ZIRCON  
TYPE: TILE  
DIMENSIONS: 18" x 36"  
INSTALLATION: HERRINGBONE, U.N.O.  
FOR USE IN CORRIDORS AND OFFICES

VINYL COMPOSITION TILE

AS MANUFACTURED BY MANNINGTON  
SALES REPRESENTATIVE: JESSICA D'ANGELO  
PHONE: 610-675-6599

VCT-1  
STYLE: PROGRESSIONS OR APPROVED EQUAL  
COLOR: 55137 SANDRIFT  
DIMENSIONS: 12" x 12" x 1/2"

VCT-2  
STYLE: PROGRESSIONS OR APPROVED EQUAL  
COLOR: 55139 PUTTY  
DIMENSIONS: 12" x 12" x 1/2"

VCT-3  
STYLE: PROGRESSIONS OR APPROVED EQUAL  
COLOR: 55123 WHEAT  
DIMENSIONS: 12" x 12" x 1/2"

VCT-4  
STYLE: PROGRESSIONS OR APPROVED EQUAL  
COLOR: 55123 WHEAT  
DIMENSIONS: 12" x 12" x 1/2"

VCT-5  
STYLE: PROGRESSIONS OR APPROVED EQUAL  
COLOR: 55525 CALICO  
DIMENSIONS: 12" x 12" x 1/2"

VCT-6  
STYLE: PROGRESSIONS OR APPROVED EQUAL  
COLOR: 55265 FROSTED JADE  
DIMENSIONS: 12" x 12" x 1/2"

VCT-7  
STYLE: PROGRESSIONS OR APPROVED EQUAL  
COLOR: 55509 DARK BARK  
DIMENSIONS: 12" x 12" x 1/2"

SOLID RUBBER TILE

AS MANUFACTURED BY MANNINGTON COMMERCIAL  
SALES REPRESENTATIVE: JESSICA D'ANGELO  
PHONE: 610-675-6599

SRT-1  
STYLE: COLORSPEC - SCULPTURED  
COLOR: SAND DOLLAR  
DIMENSIONS: 18 1/8" X 18 1/8" X 1/8"

SRT-2  
STYLE: COLORSPEC - SCULPTURED  
COLOR: 865 STRAW  
DIMENSIONS: 18 1/8" X 18 1/8" X 1/8"

SRT-3  
STYLE: COLORSPEC - SCULPTURED  
COLOR: 862 CANYON  
DIMENSIONS: 18 1/8" X 18 1/8" X 1/8"

SRT-4  
STYLE: COLORSPEC - SCULPTURED  
COLOR: SHADOW GRAY  
DIMENSIONS: 18 1/8" X 18 1/8" X 1/8"

RUBBER STAIR TREAD

AS MANUFACTURED BY MANNINGTON COMMERCIAL  
SALES REPRESENTATIVE: JESSICA D'ANGELO  
PHONE: 610-675-6599

RST-1  
STYLE: P-RWS PLATFORM IMPAIRED STAIR TREAD  
2" ABRASIVE STRIP IN CONTRASTING COLOR  
TREAD COLOR: T8D  
ABRASIVE STRIP COLOR: T8D  
DIMENSIONS: 51 X 18 1/8" THICKNESS  
NOSE: SQUARE

SHEET VINYL

AS MANUFACTURED BY MANNINGTON  
SALES REPRESENTATIVE: JESSICA D'ANGELO  
PHONE: 610-675-6599

SV-1  
STYLE: BIOSPEC MD OR APPROVED EQUAL  
COLOR: SANDRIFT 15203  
DIMENSIONS: 6' ROLL GOODS X 0.08" THICKNESS  
HEAT WELD: COLOR MATCHING

SVB-1  
FLASH COVE WALL BASE OR APPROVED EQUAL  
STYLE: TO MATCH SV-1  
COLOR: TO MATCH SV-1  
DIMENSIONS: 6" H  
ACCESSORIES: #W40 ROUND CAP - 1/8" AND 1-1/8" RADIUS PLASTIC COVE FILET STRIP

SV-2  
STYLE: BIOSPEC MD OR APPROVED EQUAL  
COLOR: SANDRIFT 15203  
DIMENSIONS: 6' ROLL GOODS X 0.08" THICKNESS  
HEAT WELD: COLOR MATCHING

SV-3  
FLASH COVE WALL BASE OR APPROVED EQUAL  
STYLE: TO MATCH SV-1  
COLOR: TO MATCH SV-1  
DIMENSIONS: 6" H  
ACCESSORIES: #W40 ROUND CAP - 1/8" AND 1-1/8" RADIUS PLASTIC COVE FILET STRIP

CERAMIC TILE

AS MANUFACTURED BY GST  
SALES REPRESENTATIVE: JAMIE BLOCK  
PHONE: 215-316-1731

CT-1  
STYLE: SPARK COLORBODY PORCELAIN OR APPROVED EQUAL  
COLOR: TOASTED LUSTER SK32  
DIMENSIONS: 12" x 12"  
GROUT COLOR: T8D  
GROUT WIDTH: T8D

RESINOUS FLOORING

AS MANUFACTURED BY STONHARD, INC  
SALES REPRESENTATIVE: BOB STEIN  
PHONE: 610-418-0171

RS-1  
STYLE: STONHARD STONSHIELD URT  
COLOR: ACORN  
TEXTURE: MEDIUM  
GAUGE: 1/8"  
WEARING SURFACE: CLEAR UV RESISTANT, ALIPHATIC POLYSPARTIC URETHANE SEALER

RS-2  
STYLE: STONHARD STONSHIELD URT  
COLOR: DRIFTWOOD  
PATTERN: MEDIUM  
GAUGE: 1/8"  
WEARING SURFACE: CLEAR UV RESISTANT, ALIPHATIC POLYSPARTIC URETHANE SEALER

RSB-1  
STYLE: TO MATCH RS-1  
COLOR: TO MATCH RS-1  
DIMENSIONS: 6" H INTEGRAL BASE

RS-2  
STYLE: STONHARD STONSHIELD URT  
COLOR: DRIFTWOOD  
PATTERN: MEDIUM  
GAUGE: 1/8"  
WEARING SURFACE: CLEAR UV RESISTANT, ALIPHATIC POLYSPARTIC URETHANE SEALER

RSB-2  
STYLE: TO MATCH RS-2  
COLOR: TO MATCH RS-2  
DIMENSIONS: 6" H INTEGRAL BASE

ENTRANCE MAT

AS MANUFACTURED BY THE MOHAWK GROUP - LEES  
SALES REPRESENTATIVE: MICHELLE RUBANDO  
PHONE: 215-630-6993

EM-1  
COLLECTION: TUFF STUFF OR APPROVED EQUAL  
STYLE: STEP IN STYLE MODULAR GT066  
COLOR: BLARNEY STONE 05518  
DIMENSIONS: 24" x 24"  
INSTALLATION: BRICK

EM-2  
COLLECTION: TUFF STUFF OR APPROVED EQUAL  
STYLE: STEP IN STYLE MODULAR GT066  
COLOR: BLARNEY STONE 05518  
DIMENSIONS: 24" x 24"  
INSTALLATION: BRICK

EM-3  
COLLECTION: TUFF STUFF OR APPROVED EQUAL  
STYLE: STEP IN STYLE MODULAR GT066  
COLOR: BLARNEY STONE 05518  
DIMENSIONS: 24" x 24"  
INSTALLATION: BRICK

FLOORING ACCESSORIES

ACCESSORY PIECES: SCHLUTER TRANSITION STRIPS  
CARPET TO RESILIENT OR SHEET VINYL: SCHLUTER SCHEME-AE100  
CARPET TO LVT: SCHLUTER SCHEME-AE100  
CARPET TO CERAMIC TILE: SCHLUTER SCHEME-AE100  
CARPET TO EXISTING: SCHLUTER-BOND-NAMP-AEPP 100.865  
CERAMIC TILE TO EPOXY: SCHLUTER SCHEME-AE100  
CERAMIC TILE TO SHEET VINYL: SCHLUTER SCHEME-AE100

FABRIC WRAPPED PANELS

AS MANUFACTURED BY CARNEGIE FABRICS  
SALES REPRESENTATIVE: TERRI MARTELL  
PHONE: 305-562-6411

FWP-1  
STYLE: XOREL - FLUX 6557  
COLOR: #P1  
CONTENTS: 100% XOREL  
WIDTH: 56"  
REPEAT: 3/4" LENGTH  
BACKING: ACRYLIC BACKING

CUBICLE CURTAIN

AS MANUFACTURED BY DESIGNTEX  
SALES REPRESENTATIVE: STAN SKULSKI  
PHONE: 610-864-2344

TO BE INSTALLED 15" A.F.F. TO BOTTOM OF HEM WITH CODE COMPLIANT MESH AT TOP WHERE REQUIRED.

CC-1  
STYLE: SUGAR LASH 7510-402  
COLOR: TEMPEST  
WIDTH: 72"  
PATTERN REPEAT: 48 1/2" V X 24 1/4" H  
CONTENTS: 100% TREVIRA CS

WINDOW TREATMENT

AS MANUFACTURED BY MEGHOSHADOWS SYSTEMS  
SALES REPRESENTATIVE: RICH ROSENBAUM  
PHONE: 215-662-9075

WF-1  
STYLE: FASARA DECORATIVE WINDOW FILMS  
PATTERN: RIKYU SHIPTOK  
DIMENSIONS: 50" W X 98.4 L

WF-2  
STYLE: FASARA DECORATIVE WINDOW FILMS  
PATTERN: RIKYU SHIPTOK  
DIMENSIONS: 50" W X 98.4 L

WINDOW FILM

AS MANUFACTURED BY 3M  
SALES REPRESENTATIVE: BOB SWARTLEY  
PHONE: 610-409-8000

WF-1  
STYLE: FASARA DECORATIVE WINDOW FILMS  
PATTERN: RIKYU SHIPTOK  
DIMENSIONS: 50" W X 98.4 L

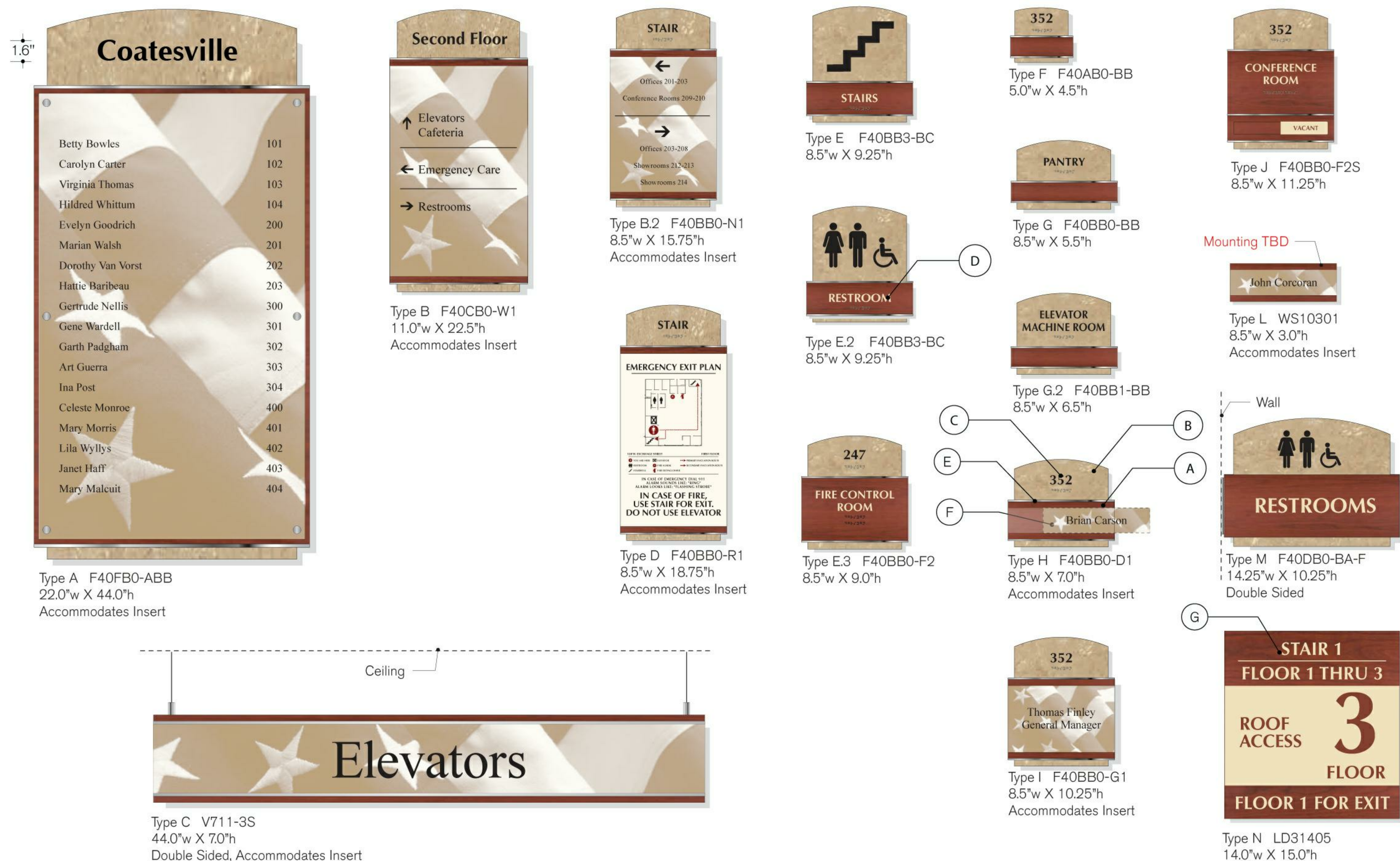
WF-2  
STYLE: FASARA DECORATIVE WINDOW FILMS  
PATTERN: RIKYU SHIPTOK  
DIMENSIONS: 50" W X 98.4 L

SPECIALTY EQUIPMENT SCHEDULE

EQUIP. NUMBER	EQUIPMENT DESCRIPTION	RESPONSIBILITIES			REQUIRES BLOCKING	REMARKS
		PURCHASED BY	RELOCATED/ PLACED BY	INSTALLED BY		
001	COMPUTER WITH KEYBOARD AND MOUSE	OWNER		CONTRACTOR		INSTALLED WITH LINKS PANIC ALARM SYSTEM
002	EXAM TABLE		OWNER	OWNER		
003	EXAM TABLE		OWNER	OWNER		
005	WORKSTATION MOUNTING BRACKET W/ADJUSTIBLE ARM	OWNER		CONTRACTOR	X	
007	MOBILE CART		OWNER	OWNER		
008	PATIENT TABLE WITH CHATTANOOGA		OWNER	OWNER		
010	CASH/CART		OWNER	OWNER		
011	SINGLE BOX GLOVE DISPENSER	OWNER		CONTRACTOR		
014	HAMPER, SOILED LINEN		OWNER	OWNER		
018	LIGHT, EXAM, PORTABLE	OWNER		OWNER		
021	LOCKERS		CONTRACTOR	OWNER		
023	MICROWAVE	OWNER		OWNER		
025	PRINTER/FAX/COPIER, COUNTERTOP	OWNER		CONTRACTOR		
026	CC-1	OWNER		CONTRACTOR		
031	REFRIGERATOR WITH FREEZER	OWNER		CONTRACTOR		
032	REFRIGERATOR, UNDERCOUNTER	OWNER		CONTRACTOR		
033	REFRIGERATOR, UNDERCOUNTER	OWNER		CONTRACTOR		
033A	REFRIGERATOR WITH FREEZER	OWNER		CONTRACTOR		
034	DISPOSAL, SHARPS, WALL MOUNT	OWNER		CONTRACTOR		
034B	DISPOSAL, SHARPS, WALL MOUNT	OWNER		CONTRACTOR		
035	MOBILE CASEWORK	OWNER	OWNER	OWNER		
044	VISUAL DISPLAY BOARD, 48"	CONTRACTOR		CONTRACTOR		
047A	TV, 51" LCD, WALL MOUNTED	CONTRACTOR		CONTRACTOR	X	
047B	TV, 41" LCD, WALL MOUNTED	CONTRACTOR		CONTRACTOR	X	
047C	TV, 51" LCD, WALL MOUNTED	CONTRACTOR		CONTRACTOR	X	
051	BLOOD PRESSURE MACHINE		OWNER	OWNER		
058	SCALE, CLINICAL, ADULT, DIGITAL, FLOOR		OWNER	OWNER		
070	DISH WASHER		OWNER	OWNER		
071	WASHING MACHINE		OWNER	OWNER		
072	OWNER		OWNER	OWNER		
073A	HOT/COLD PACK		OWNER	OWNER		
073B	HOT/COLD PACK		OWNER	OWNER		HOT PACK
074	MIRROR, WALL MOUNTED	CONTRACTOR		CONTRACTOR		
074A	MIRROR, MOBILE		OWNER	OWNER		
116	STOVE		OWNER	OWNER		
117	ELLIPTICAL CROSS TRAINER		CONTRACTOR	CONTRACTOR		
118	UPRIGHT BIKE		OWNER	OWNER		
119A	ROW MACHINE		CONTRACTOR	CONTRACTOR		
119B	LOW ROW MACHINE		CONTRACTOR	CONTRACTOR		
120	CABLE COLUMN		CONTRACTOR	CONTRACTOR		
121	ABDOMINAL MACHINE		CONTRACTOR	CONTRACTOR		
122	ARM CURL MACHINE		CONTRACTOR	CONTRACTOR		
123	BICEPS/TRICEPS MACHINE		CONTRACTOR	CONTRACTOR		
124	CHEST PRESS		CONTRACTOR	CONTRACTOR		
125	LATERAL PULL MACHINE		CONTRACTOR	CONTRACTOR		
126	GLUTE MACHINE		CONTRACTOR	CONTRACTOR		
127	LEG CURL MACHINE		CONTRACTOR	CONTRACTOR		
128	LEG PRESS MACHINE		CONTRACTOR	CONTRACTOR		
129	LEG EXTENSION MACHINE		CONTRACTOR	CONTRACTOR		
130	SHOULDER PRESS		CONTRACTOR	CONTRACTOR		
131	TORSO ROTATION MACHINE		CONTRACTOR	CONTRACTOR		
132A	DECLINE BENCH		CONTRACTOR	CONTRACTOR		
132B	FLAT BENCH		CONTRACTOR	CONTRACTOR		
132C	FLAT BENCH		CONTRACTOR	CONTRACTOR		
133	OVERHEAD PRESS		CONTRACTOR	CONTRACTOR		
134	LEG RISE MACHINE		CONTRACTOR	CONTRACTOR		
136	DUMBELL RACK		CONTRACTOR	CONTRACTOR		
137	PANCAHANG BAG		CONTRACTOR	CONTRACTOR		
138	CHAIR, CLINICAL, RECLINER, TREATMENT	OWNER		CONTRACTOR		PROVIDE UNISTRUT SUPPORTS ABOVE CEILING
150	DOLLY		OWNER	OWNER		
151	SKELETON		OWNER	OWNER		
152	WEIGHT STORAGE		OWNER	OWNER		
154A	MATT TABLE		OWNER	OWNER		
154B	TREATMENT TABLE		OWNER	OWNER		
154C	TREATMENT TABLE		OWNER	OWNER		
155	TREADMILL		OWNER	OWNER		
156A	TREADMILL		OWNER	OWNER		
156B	TREADMILL		OWNER	OWNER		
156C	TREADMILL		OWNER	OWNER		
156D	TREADMILL		CONTRACTOR	CONTRACTOR		
156E	TREADMILL		OWNER	OWNER		
158A	PARRALLEL BARS	OWNER		OWNER		
159B	PARRALLEL BARS, WALL MOUNTED	OWNER		OWNER	X	
160A	WALL PULLY		OWNER	OWNER	X	
160B	WALL PULLY		OWNER	OWNER	X	
160C	WALL PULLY		OWNER	OWNER	X	
160D	WALL PULLY		OWNER	OWNER	X	
162	CYBEX MACHINE		OWNER	OWNER		



three inches = one foot  
one and one half inches = one foot  
one inch = one foot  
three quarters inch = one foot  
one half inch = one foot  
three eighths inch = one foot  
one quarter inch = one foot  
one eighth inch = one foot



**BRN**  
Face Finish  
 (A) **LW104** Dark Cherry  
Backer Finish  
 (B) **LT3526** Travertine

Raised Copy  
 (C) **CO101** Black  
Font Optima Bold  
Raised Copy  
 (D) **CO105** Desert Sand  
Font Optima Bold

Metal Accent  
 (E) Polished  
Insert  
 (F) Media: Ivory Paper;  
Font: Times New Roman (Type D Optima Bold);  
Graphics/Copy Color: Black;  
Background: shutterstock\_21682717\_sepia.jpg  
Type D- No Backaround Image

(G) Acrylic Construction:  
Digitally Printed to  
resemble <**LW104** Dark Cherry>

**takeform**  
Architectural Graphics  
One Mahar Way, Medina, New York, 14103  
585.798.8888 585.798.8889  
takeform.net

**Fusion**<sup>TM</sup>  
SIGNAGE FOR INTERIOR SPACES

Client:  
VA Hospital:  
Project:  
VA Hospital:  
Date: Drawn By:  
Filename:  
Revisions:

**Fusion 40**  
Notes:  
Not to scale.  
Dimensions indicated are  
approximate.  
Request Approval Drawings  
for exact dimensions.

Sample text shown for  
layout only.

<b>Product Approval</b>	
NO CHANGES	
Approved By: _____	Date: _____
WITH CHANGES AS NOTED	
Approved By: _____	Date: _____
Product will be manufactured as indicated on this document. Please review carefully.	

Rendering 1 of 1  
**FOR REFERENCE ONLY**

FULLY SPRINKLERED  
NOTE: SEE SHEET AE-002 FOR DEDUCT ALTERNATES ISSUED FOR BID

		CONSULTANTS:								PROJECT MANAGER:		Project Number 3627	Scale	Drawing Title  SIGNAGE STANDARDS		Project Title  RENOVATE BUILDING 69		VA Project Number 542-CSI-203		Office of Facilities Management   	
		Project Manager BRAY MOONEY CONSULTING		Architect ARRAY HEALTHCARE FACILITIES SOLUTIONS		Structural Engineer WZG, STRUCTURAL CONSULTING ENGINEERS		MEP/FP Engineer APOGEE CONSULTING GROUP		Civil Engineer GUIDON DESIGN		Fire Protection Consultant HARRINGTON GROUP		Cost Estimator BRAY MOONEY CONSULTING		Aquatic Consultant ATLANTIC AQUATIC ENGINEERING		Associate Architects W. COOK ARCHITECTS			
		410 E. 21 STREET CHESTER, PA. 19013 Tel: (610) 872-3716		2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA. 19406 Tel: (610) 275-5599		P.O. BOX 24 40 LITTLE ROAD ZIEGLERVILLE, PA. 19422 Tel: (610) 287-3194		7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC. 27606 Tel: (919) 858-7420		2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 600-6388		7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC. 28227 Tel: (704) 531-9077		410 E. 21 STREET CHESTER, PA. 19013 Tel: (610) 872-3716		1823 DEEP RUN ROAD PIPERSVILLE, PA. 18947 Tel: (215) 786-0409		1251 ROMANSVILLE ROAD COATESVILLE, PA. 19320 Tel: (610) 383-4460			
Revisions		Date																			



1. ALL WORK SHALL CONFORM TO ALL LOCAL, STATE, AND NATIONAL CODES ALONG WITH ALL VA STANDARDS. EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS.

2. THE MECHANICAL CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, FEES, AND INSPECTIONS REQUIRED FOR HIS WORK.

3. ALL MATERIALS, EQUIPMENT AND PRODUCTS INCORPORATED IN THE WORK UNDER THE CONTRACT SHALL BE NEW, OF A SUITABLE GRADE FOR THE PURPOSES INTENDED, AND TO THE EXTENT POSSIBLE, STANDARD PRODUCTS OF THE VARIOUS MANUFACTURERS EXCEPT WHERE SPECIAL CONSTRUCTION OR PERFORMANCE FEATURES ARE CALLED FOR.

4. ANY EQUIPMENT OR MATERIAL DEVIATIONS FROM THAT SPECIFIED OR DETAILED ON THIS DRAWING SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT/ENGINEER. ALL PROPOSED EQUIPMENT DEVIATIONS SUBMITTED SHALL BE SIMILAR BOTH IN QUALITY AND CAPACITY TO THAT EQUIPMENT SPECIFIED.

5. ALL MECHANICAL EQUIPMENT SHALL BE LISTED AND LABELED BY UNDERWRITERS LABORATORIES (U.L.).

6. THE MECHANICAL CONTRACTOR SHALL INSTALL EQUIPMENT AS SHOWN ON THE DRAWINGS ALLOWING FOR SUFFICIENT ACCESS AND CLEARANCE SPACE FOR EQUIPMENT MAINTENANCE, REPAIRS AND REPLACEMENT. PROVIDE PROPER CLEARANCES FOR REQUIRED PIPING AND ELECTRICAL SERVICES AND CONNECTIONS. INSTALL ALL EQUIPMENT WITH REQUIRED ACCESS AND CLEARANCES IN ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS AND WITH ALL APPLICABLE CODES AND STANDARDS.

7. THE MECHANICAL CONTRACTOR SHALL COORDINATE THE INSTALLATION AND ROUTING OF ALL PROPOSED DUCTWORK, PIPING AND EQUIPMENT WITHIN THE BUILDING STRUCTURE.

8. THE MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL HIS OWN SUPPORT EQUIPMENT. LOCATIONS SHALL BE COORDINATED WITH ALL CONTRACTORS PRIOR TO INSTALLATION.

9. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL POWER CONNECTIONS TO THE EQUIPMENT PROVIDED UNDER THIS CONTRACT.

10. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONTROL WIRING FOR HIS EQUIPMENT.

11. DUCTWORK AND PIPING LAYOUTS AND LOCATIONS ARE SCHEMATIC. DO NOT SCALE THESE DRAWINGS. EXACT ROUTING OF DUCTWORK AND PIPING MUST BE DETERMINED IN THE FIELD. ALL DIMENSIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR BY ACTUAL MEASUREMENT AND OBSERVATION BEFORE ORDERING OR FABRICATING ANY DUCTWORK, PIPING OR EQUIPMENT. ANY DISCREPANCIES BETWEEN THE RECORD DRAWINGS AND THE FIELD CONDITIONS AND THE RECORD DRAWINGS SHALL BE IMMEDIATELY REPORTED TO THE AE AND VMACT CORP BEFORE THE PERFORMANCE OF ANY WORK. FAILURE TO VERIFY AND REPORT SHALL CONSTITUTE THE CONTRACTOR'S ACCEPTANCE OF THE EXISTING CONDITIONS AS FIT FOR THE PROPER EXECUTION OF HIS WORK. SEE ARCHITECTURAL NOTES FOR FINAL LOCATION OF EQUIPMENT.

12. DUCTWORK AND PIPING SHALL BE KEPT AS CLOSE AND AS HIGH AS POSSIBLE TO THE BUILDING WALLS, CEILING AND FLOOR AND ROOF STRUCTURES IN ORDER THAT THE MAXIMUM AMOUNT OF SPACE IS AVAILABLE. ADDITIONAL OFFSETS, FITTINGS, ETC. NOT SHOWN BUT REQUIRED TO MAINTAIN MAXIMUM CLEARANCE SHALL BE PROVIDED AT NO ADDITIONAL COST.

13. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PATCHING, PAINTING AND CLEANING ASSOCIATED WITH THIS PROJECT UNLESS NOTED OTHERWISE.

14. PROVIDE A COMPLETE 1-YEAR WARRANTY ON ALL LABOR AND MATERIALS.

15. CONTRACTOR SHALL FURNISH A BOUND SET OF OPERATING AND MAINTENANCE INSTRUCTIONS FOR ALL EQUIPMENT TO THE OWNER UPON COMPLETION OF PROJECT.

16. INSTALL ESCUTCHEONS IN ALL PLACES WHERE PIPING PENETRATES A WALL IN AN EXPOSED LOCATION.

17. THE MECHANICAL CONTRACTOR SHALL MAKE A COMPLETE REVIEW OF THE MECHANICAL PLANS, INCLUDING THE SCHEDULES AND DETAILS PRIOR TO INSTALLATION OF ANY MECHANICAL SYSTEMS AND SHALL RESOLVE ANY CONFLICTS WITH THE ENGINEER.

18. CONTRACTOR SHALL TAKE POSSESSION OF AND DISPOSE OF ALL EXISTING MATERIALS AND EQUIPMENT BEING DEMOLISHED AND/OR REMOVED. ALL ITEMS SHALL BE DISPOSED OF IN FULL COMPLIANCE WITH ALL APPLICABLE LAWS, RULES, AND REGULATIONS THAT APPLY. CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE DISPOSAL.

19. INSTALL SHUTOFF-VALVE AT EACH BRANCH CONNECTION TO SUPPLY MAINS, AND AT SUPPLY CONNECTION TO EACH PIECE OF EQUIPMENT. INSTALL CHECK VALVES AT EACH PUMP DISCHARGE AND ELSEWHERE AS REQUIRED TO CONTROL FLOW DIRECTION.

20. DRAWING PLANS, SCHEMATICS, AND DIAGRAMS INDICATE GENERAL LOCATION AND ARRANGEMENT OF PIPING SYSTEMS. INSTALL PIPING SHALL BE TO BE FIELD VERIFIED AND ADJUSTED. JOINTS AND FITTINGS TO BE FIELD VERIFIED AND ADJUSTED. ALL BUTT JOINTS, DIAGONAL RUNS ARE PROHIBITED UNLESS SPECIFICALLY INDICATED OTHERWISE. INSTALL PIPING FREE OF SAGS AND BENDS. INSTALL PIPING TO ALLOW APPLICATION OF INSULATION.

21. REAM ENDS OF PIPES AND TUBES AND REMOVE BURRS. BEVEL PLAN ENDS OF STEEL PIPE. REMOVE SCALE, SLAG, DIRT, AND DEBRIS FROM INSIDE AND OUTSIDE OF PIPE AND FITTINGS BEFORE ASSEMBLY.

22. THREADED JOINTS: THREAD PIPE WITH TAPERED PIPE THREADS ACCORDING TO ASME B1.20.1. CUT THREADS FULL AND CLEAN USING PIPE REAMER. REAM THREADS TO BE FIELD VERIFIED AND ADJUSTED. JOINTS AND FITTINGS TO BE FIELD VERIFIED AND ADJUSTED. DO NOT APPLY TAPE OR PIPE THREAD COMPOUND TO EXTERNAL PIPE THREADS UNLESS DRY SEAL THREADING IS SPECIFIED. DAMAGED THREADS: DO NOT USE PIPE OR PIPE FITTINGS WITH THREADS THAT ARE CORRODED OR DAMAGED. DO NOT USE PIPE SECTIONS THAT HAVE CRACKED OR OPEN WELDS.

23. INSTALL MANUAL AIR VENTS AT HIGH POINTS IN PIPING, AT HEAT-TRANSFER COLLS, AND ELSEWHERE AS REQUIRED FOR SYSTEM AIR VENTING.

24. CUT INSULATION IN A MANNER TO AVOID COMPRESSING INSULATION TO MORE THAN 75 PERCENT OF ITS NOMINAL THICKNESS. FINISH INSTALLATION WITH SYSTEMS AT OPERATING CONDITIONS. REPAIR JOINT SEPARATIONS AND CRACKING DUE TO THERMAL MOVEMENT. REPAIR DAMAGED INSULATION FACINGS BY APPLYING SAME FACING MATERIAL OVER DAMAGED AREAS. EXTEND PATCHES AT LEAST 4 INCHES BEYOND DAMAGED AREA. PATCHES SHALL BE MADE OF 1/2" AND 5/8" SEAL PATCHES. PATCHES SHALL BE MADE OF 1/2" AND 5/8" SEAL PATCHES.

25. INSULATE INSTRUMENT CONNECTIONS FOR THERMISTERS, PRESSURE GAUGES, PRESSURE TEMPERATURE TAPES, SENSITIVE CONNECTIONS, THERMISTERS, SENSORS, SWITCHES, AND TRANSDUCERS ON INSULATED PIPES, VESSELS, AND EQUIPMENT. SHAPE INSULATION AT THESE CONNECTIONS BY TAPERING IT TO AND AROUND THE CONNECTION WITH INSULATING CEMENT AND FINISH WITH FINISHING GUMMED MASTIC, AND FLASHING SEALANT.

26. THE MECHANICAL CONTRACTOR SHALL TAKE THE LEAD IN PREPARATION OF COORDINATION DRAWINGS, SUCH DRAWINGS SHALL BE CO-ORDINATED WITH RECORD DRAWINGS FROM THE GENERAL CONTRACTOR, AND ALL OTHER MAJOR AND MINOR SUBCONTRACTORS. PROVIDE PLAN VIEWS, SECTIONS AND ELEVATIONS, AS REQUIRED, TO FULLY COORDINATE ALL NEW WORK WITH ITSELF AND EXISTING CONDITIONS. DRAWINGS SHALL SHOW, BUT NOT BE LIMITED TO, ALL DUCTWORK, AIR DISTRIBUTION, MECHANICAL EQUIPMENT, MECHANICAL PIPING, FIRE PROTECTION PIPING, ELECTRICAL PIPING, CABLE TRAYS, LIGHTING FIXTURES, GUIDING GRID AND HEIGHT, BEAMS AND JOISTS (WITH ELEVATIONS MARKED), ELECTRICAL CONDUIT LARGER THAN 2 INCHES IN DIAMETER AND ANY OTHER CEILING MOUNT DEVICES OR EQUIPMENT THAT PROTRUDE INTO THE CEILING CAVITY. IF THERE ARE ANY OUTSTANDING ISSUES THAT CANNOT BE RESOLVED, COORDINATION WITH ARCHITECT AND/OR ENGINEER THROUGH THE VA COTD FOR GUIDANCE AND MAKE CORRECTIONS IN ACCORDANCE WITH DIRECTIONS GIVEN. IT IS IMPORTANT TO NOTE THAT FABRICATION CANNOT BEGIN UNTIL COORDINATION DRAWINGS HAVE BEEN APPROVED. ANY INSTANT COMMENCED PRIOR TO APPROVAL IS TAKEN AT THE CONTRACTORS OWN RISK AND MAY HAVE TO BE MODIFIED, MOVED AND/OR RECONFIGURED AT CONTRACTORS COST.

ALT #1	<p><b>ALTERNATE NO. 1: WEST ENTRANCE CANOPY PROJECT TO INCLUDE AL WORK EXCEPT:</b></p> <p>EPDM roof on tapered insulation on ribbed metal deck (exposed below-painted) on steel frame (exposed and painted) on 3" deep reinforced concrete footings (see structural). Provide metal panel fascia (similar to new East side, ALT. No. 6). Resident heat tapping into under canopy to include entrance area, stairs and ramps.</p>
ALT #3	<p><b>ALTERNATE NO. 3: BRICK WEARING FACE ON NEW RETAINING WALL PROJECT TO INCLUDE AL WORK EXCEPT:</b></p> <p>Add one (1) wythe brick and precast concrete cap to proposed concrete retaining wall at North wall of Pool Equipment Room and West and North walls of Pool Enclosure Barn.</p>
ALT #4	<p><b>ALTERNATE NO. 4: BRICK GABLE END WALL PROJECT TO INCLUDE AL WORK EXCEPT:</b></p> <p>Replace proposed polycarbonate envelope at West end and one (1) wythe brick exterior and one (1) wythe brick gable interior on each side of reinforced 8" CMU wall per plan. Bond beam at 12' AF. Provide 2" rigid insulation at exterior side of CMU.</p>
ALT #5	<p><b>ALTERNATE NO. 4: WEIGHT CONDITIONING FIT OUT PROJECT TO INCLUDE AL WORK EXCEPT:</b></p> <p>Provide all interior walls, flooring, and finishes for W.T. Suite. Area to include electrical and plumbing fixtures and connections.</p>
ALT #6	<p><b>ALTERNATE NO. 5: STAFF BREAK ROOM &amp; EAST ENTRY VESTIBULE PROJECT TO INCLUDE AL WORK EXCEPT:</b></p> <p>EPDM roof on tapered insulation on ribbed metal deck on existing steel channel frame. Provide aluminum storefront window system enclosures. Provide metal panel fascia and soffit. Provide second set of storefront entrance doors. See document set for plans, section, exterior elevations, and interior finishes.</p>
ALT #7	<p><b>ALTERNATE NO. 7: EAST ENTRANCE RAMP AND WALL PROJECT TO INCLUDE AL WORK EXCEPT:</b></p> <p>Provide 10" reinforced concrete wall at North and Northeast sides of east entrance ramp. Provide 3" deep 8" x 8" wide sidewalk on compacted fill with turned down edge at South and Southwest sides. Provide 2.5" OD painted steel pipe rail with stainless steel mesh infill on top of new concrete wall (rail and mesh are site only). See document set for plans, section, and exterior elevations.</p>
ALT #8	<p><b>ALTERNATE NO. 8: AUDIOLOGY FITOUT PROJECT TO INCLUDE ALL WORK EXCEPT:</b></p> <p>Provide interior walls, flooring, and finishes for Audiology Suite. Area to include electrical and plumbing fixtures and connections.</p>
ALT #9	<p><b>ALTERNATE NO. 9: VENTILATION DUCTWORK PROJECT TO INCLUDE ALL WORK EXCEPT:</b></p> <p>Provide ventilation supply and exhaust ductwork demolition and installation.</p>

A	AAH	ARCHITECT / ENGINEER	D	DAMPER - AUTOMATIC	HD	HOOD	MP	MANHOLE	SP	SUPPLY AIR DIFFUSER
	AAR	AIR TO AIR HEAT EXCHANGER	D-1	OUTDOOR AIR DAMPER	HOA	HANDOFF/AUTOMATIC	MHP	MOTOR HORSEPOWER	SDR	SMOKE DAMPER
	AB	AIR BLENDER	D-2	RETURN AIR DAMPER	HRA	HOT RETURN AIR DAMPER	MIN	MINUT	SD	SMOKE DAMPER (RETURN)
	AAV	AUTOMATIC AIR VENT	D-3	RELIEF AIR DAMPER	HP	HORSEPOWER	MM	MILLIMETER	SDS	SMOKE DAMPER (SUPPLY)
	ACC	AIR COOLED CONDENSER	D-B	DECIBELS	HPDT	HIGH PRESSURE DRIP TRAP	MOV	MOTOR OPERATED VALVE	SEN	SENSIBLE HEAT
	ACH	AIR COOLED CHILLER	DB	DRY-BULB TEMPERATURE	HDB	HIGH-BULB TEMPERATURE	MPR	MID PRESSURE RETURN (STEAM CONDENSATE)	SPR	STEAM PURGE
	ACCU	AIR-COOLED CONDENSING UNIT	DDU	DIRECT DIGITAL CONTROLS	HDC	HIGH PRESSURE SUPPLY (STEAM) CONDENSATE)	MPS	MID PRESSURE STEAM	SG	SUPPLY AIR GRILLE
	ACD	AIR CONDITIONING UNIT	DEGR	DEGRADATION	HPS	HEAT RECOVERY COIL	MPI	MAGNETIC RESONANCE IMAGING	SHC	STEAM HANDPIPER
		AUTOMATIC CONTROL	DF	DIFFUSER	HRC	HEAT RECOVERY DEVICE	MPT	MEAN TEMPERATURE DIFFERENCE	SHI	SQUARE INCHES
	ACD-TP	AUTOMATIC CONTROL DAMPER,TWO POSITION	DIA	DIAMETER	HRP	HYPONIZED RADIANT (CEILING) PANEL	MZ	MANUAL VOLUME DAMPER	SP	STATIC PRESSURE
	AD	ACCESS DOOR	DW	DEWPOINT TEMPERATURE	HRW	HEAT RECOVERY WHEEL	M2	MINI-ZONE	SP GR	SPECIFIC GRAVITY
	AF	AIR FILTER	DP	DIFFUSER PLATE	HSTAT	HUMIDISTAT	NA	NOT APPLICABLE	SPS	SUPPLY PROCESS AND DISTRIBUTION
	AFCV	AIR FLOW CONTROL VALVE	DPA	DIFFERENTIAL PRESSURE ASSEMBLY	HMTA	HUMIDIFIER TERMINAL	NC	NOISE CRITERIA	SPD	STEAM PRESSURE REDUCING VALVE
	AFD	AIR FLOW MEASURING DEVICE	DPS	DIFFERENTIAL PRESSURE SENSOR	HUM	HUMIDIFIER UNIT MOUNTED	NA	NORMALLY CLOSED	SPS	STEAM SQUOFT FEET
	AFMD	AIR FLOW MEASURING DEVICE	DXCC	DRIFT EXPANSION COOLING COIL	HW	HOT WATER	NG	NATURAL GAS	SR	SUPPLY AIR REGISTER
	AFW	AIR FLOW WHEEL (FAN)			HCW	HOT WATER COIL	NGM	NATURAL GAS FLOWMETER	SS	STAINLESS STEEL
	AM	AIR-HANDLING UNIT	EA	EXHAUST AIR	HWT	HOT WATER HEATING COIL	NO	NORMAL	SS	STEAM TO STEAM HEAT EXCHANGER
	AMP	AMPERGE	EAT	ENTERING AIR TEMPERATURE	HWP	HEATING HOT WATER PUMP	NOA	NATIONAL OCEANIC & ATMOSPHERIC	SSR	STEAM SEPARATOR
	AP	ACCESS PANEL	EAC	EVAPORATIVE COOLER	HWR	HEATING HOT WATER RETURN	NOAM	ADMINISTRATION	ST	STEAM TRAP
	ARI	AIR PRESSURE DROP	EC	ENGINEERING CONTROL CENTER	HWS	HEATING HOT WATER SUPPLY	NO	NONE	STH	STEAM HEATER
		AIR CONDITIONING AND REFRIGERATION INSTITUTE	ECU	EVAPORATIVE CONDENSER UNIT	HWH	HOT WATER UNIT HEATER	NPL	NON-STANDARD PART LOAD VALUE	STP	STEAM PRESSURE REDUCING VALVE
	AS	AIR SEPARATOR	EED	ELECTRIC DUCT HEATER	ED	ELECTRIC DUCT DAMPER	NPS	NET POSITIVE SUCTION HEAD	SV	STEAM SILENCER
	ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS	EER	ENERGY EFFICIENCY RATIO	HX	HEAT EXCHANGER	NTS	NOT TO SCALE	SVW	STEAM TO WATER HEAT EXCHANGER
	AW	AIR WASH	EG	EXHAUST FAN	HZ	HERTZ	OA	OUTSIDE AIR	T & PCV	TEMPERATURE AND PRESSURE CONTROL VALVE
	AXF	AXIAL FLOW	EGS	EXHAUST GRILLE	IO	INPUT/OUTPUT	OAG	OUTSIDE AIR GRILLE	TAB	TESTING, ADJUSTING, BALANCE TOTAL
			EJ	ENTERING GLYCOL TEMPERATURE	IAQ	INDOOR AIR QUALITY	OAO	OUTSIDE AIR INTAKE	TDH	TOTAL DYNAMIC HEAD
	B	BOILER	EHT	EXHAUST HOOD	ED	EXHAUST DUCT	OD	OUTSIDE AIR DAMPER	TDH	TOTAL DISSOLVED SOLIDS
	B	BUTTERFLY DAMPER	EJ	EXPANSION JOINT	ICF	IN-FLUE CENTRIFUGAL FAN	OFM	OUT FLOWMETER	TDH	TOTAL DYNAMIC HEAD
	BDD	BACKDRAFT DAMPER	END	END OF CABLE DRIP (STEAM)	ICU	INTENSIVE CARE UNIT	OR	OPERATING ROOM	TDH	TOTAL DISSOLVED SOLIDS
	BDR	BASE BOARD RADIATOR	ENT	ENTERING	IDB	INSIDE DIAMETER	P	PUMP	TP	TRANSFER GRILLE
	BFT	BACKFLOW PREVENTER	ER	EXHAUST REGISTER	IFS	INTEGRAL FASE AND BYPASS	P	PUMP	TP	TRANSFER
	BFT	BOILER PLANT FIRE TUBE	ERC	ELECTRIC REHEAT COIL	INC	INCHES	PA	PASHERS	TSP	TOTAL STATIC PRESSURE
	BGM	BOTTOM GRILLE	ERP	ELECTRIC RADIANT PANEL	IN HG	INCHES OF MERCURY	PC	PUMPED CONDENSATE	TSTAT	TEMPERATURE STAT
	BHW	BRANKE HORSEPOWER	ESP	EXPANSION TANK	IN WG	INCH WATER GAGE	PCF	POUNDS PER CUBIC FOOT (FEET)	TSTAT	TEMPERATURE STAT
	BHW	HOT WATER HEATING BOILER	ET	ETHYLENE OXIDE	IN WG	INCH WATER GAGE	PD	PRESSURE DROP	TWU	THRU-WALL UNIT
	BHX	BACKWARD INCLINED WHEEL (FAN)	ETO	ELECTRIC THERMAL HEATER	IN-LB	INCH POUND	PEF	PROPELLER (TYPE) EXHAUST FAN	UF	UNDER FILTER
		EXCHANGER	EWC	EVAPORATIVE WATER COOLER	IRH	INFRARED HEATER	PFV	PRESSURE GAGE	UC	UNDER CUT
	BW	BACKWARD INCLINED WHEEL (FAN)	EWS	ENTERING WATER TEMPERATURE	ISCN	INSECT SCREEN	PCH	PREFILTER	UL	UNDER COOLER
	BUT	BOTTOM REGISTER	EX	EXISTING	IV	INLET VANES	PGW	PRESSURE GAGE WATER-COOL	UL	UNDER SILENCER
	BR	BLOCKING SAFETY CABINETS	F	FAHRENHEIT	KG	KILOGRAM	PRV	PRESSURE REGULATING (VALVE)	URV	UNDERWRITERS LABORATORY UNDERVALVE UNIT VENTILATOR
	BT	BLOWOFF TANK	F&T	FLOAT AND THERMOSTATIC COMBINATION FIRE SMOKE DAMPER	kg	KILOGRAM	PRS	PRESSURE REGULATING (VALVE)	V	VOLUME
	BT	BRITISH THERMAL UNIT PER HOUR	F/SDPR	FIRE SMOKE DAMPER	kg/HR	KILOGRAM PER HOUR	PS	PRESSURE	V	VOLUME
	BTU	BRITISH THERMAL UNIT PER HOUR	FREE AREA	FAN FREE AREA	KA	KILOCALORIE	PSI	POUNDS PER SQUARE INCH	V	VOLUME
	BWT	BOILER PLANT WATER TUBE	FCU	FLEXIBLE CONNECTION	KW	KILOWATT	PSIA	POUNDS PER SQUARE INCH - ABSOLUTE	V	VOLUME DAMPER (MANUAL OPPOSED)
			FCU	FAN COIL UNIT (4 PIPE)	kWh	KILOWATT HOUR	PSIA	POUNDS PER SQUARE INCH - ABSOLUTE	V	VOLUME DAMPER (MANUAL OPPOSED)
	C	CENTIGRADE (CELCI								

	CARBON DIOXIDE THERMOSTAT		VANED ELBOW (PROVIDE ALL SQUARE OR RECTANGULAR ELBOWS WITH VANES EVEN IF SYMBOL IS MISSING)		HPS HIGH PRESSURE STEAM PIPING
	SUPPLY DIFFUSER		VANED ELBOW (SHORT RADIUS)		MPS MEDIUM PRESSURE STEAM PIPING
	RETURN DIFFUSER/GRILL		STANDARD RADIUS ELBOW (LONG RADIUS)		LPS LOW PRESSURE STEAM PIPING
	EXHAUST GRILL				COND CONDENSATE RETURN PIPING
	ROUND FLEX DUCT				VAC VACUUM PIPING
	DIFFUSER TAG				CWS CHILLED WATER SUPPLY PIPING
	200 CFM DIFFUSER CFM				CWR CHILLED WATER RETURN PIPING
	LINEAR SLOT DIFFUSER				HWS HOT WATER SUPPLY PIPING
	BALANCING DAMPER (RECTANGULAR)				HWR HOT WATER RETURN PIPING
	BALANCING DAMPER (ROUND)				FTHWS FIN TUBE HEATING HOT WATER SUPPLY PIPING
	FIRE DAMPER				FTHWR FIN TUBE HEATING HOT WATER RETURN PIPING
	SMOKE DAMPER				PIPE UP
	INCLINED RISE, IN DIRECTION OF AIRFLOW				PIPE DOWN
	INCLINED DROP, IN DIRECTION OF AIRFLOW				BOTTOM CONNECTION
	CONNECT NEW DUCT TO EXISTING				TOP CONNECTION
	LIMIT OF DEMOLITION				CAPPED OUTLET
	UP				GLOBE VALVE
	DN				GATE VALVE
	SUPPLY DUCT (UP & DOWN)				BALL VALVE
	UP				PRESSURE RELIEF VALVE
	DN				CHECK VALVE
	EXHAUST DUCT (UP & DOWN)				PRESSURE REGULATING VALVE
	UP				WYE STRAINER VALVE
	DN				BALANCING VALVE
	UP				
	DN				
	RETURN DUCT (UP & DOWN)				
	UP				
	DN				

Project Manager	Architect	Structural Engineer	ME/EP Engineer	Civil Engineer	Fire Protection Consultant	Cost Estimator	Aquatic Consultant	Associate Architects
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Bray  
Mooney  
Consulting

Office of  
Facilities  
Management



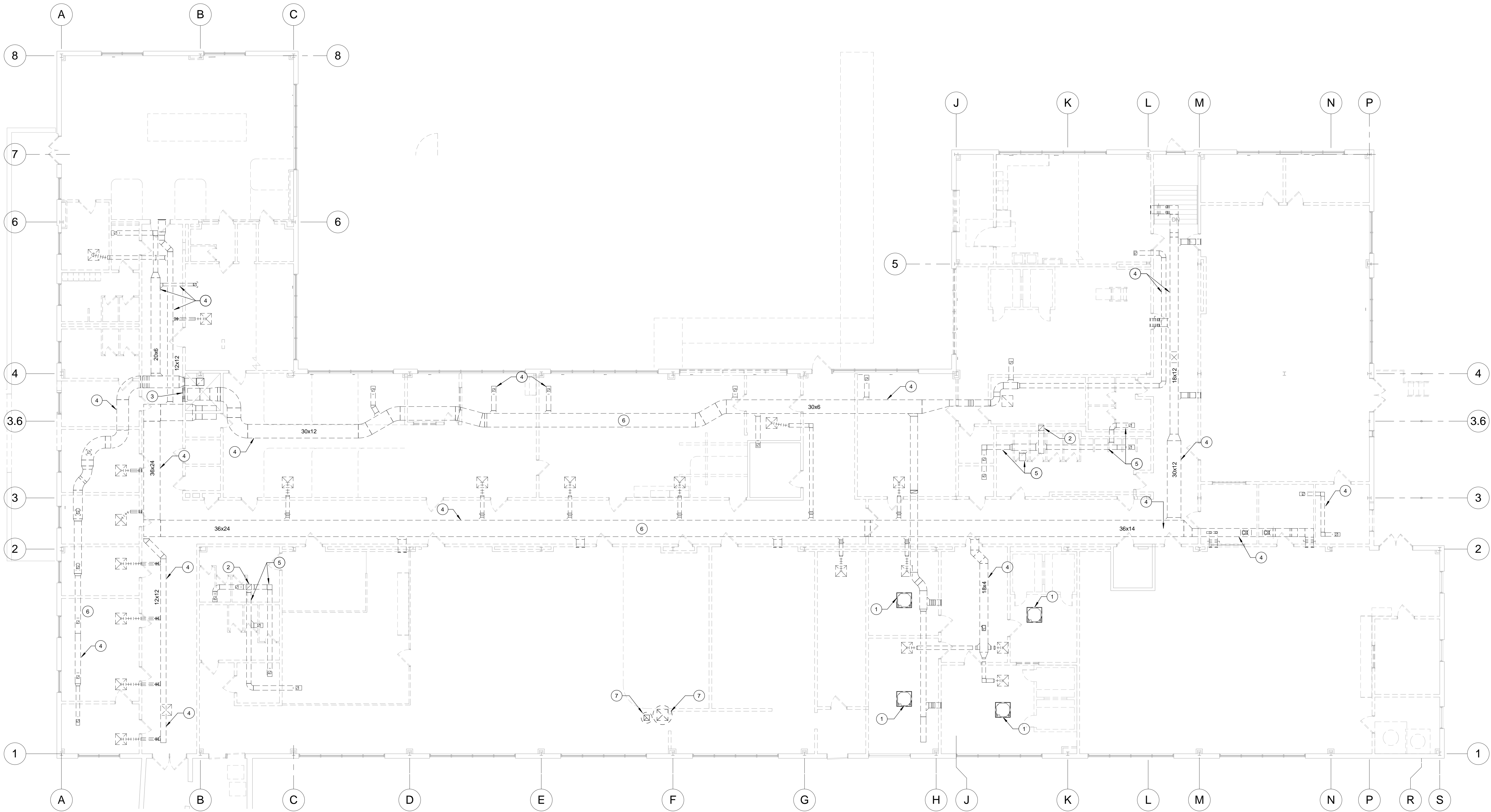
GENERAL NOTES

1. SEE ALTERNATE # 9.

KEY

NOTE

- 1 DEMOLISH EXISTING SPLIT SYSTEM CASSETTE TYPE. REMOVE CONDENSING UNIT ON ROOF AS WELL AND ALL ASSOCIATED REFRIGERANT AND CONDENSATE DRAIN PIPING.
- 2 EXHAUST DUCT UP TO EXHAUST FAN ON ROOF TO REMAIN.
- 3 EXISTING RETURN AIR GRILLE IN CORRIDOR TO BE DEMOLISHED.
- 4 EXISTING DUCTWORK AND ASSOCIATED AIR TERMINALS TO BE DEMOLISHED, TYPICAL.
- 5 DEMOLISH EXISTING EXHAUST SYSTEM.
- 6 EXISTING DUCTWORK TO BE DEMOLISHED.
- 7 DEMOLISH EXISTING DUCT AND EXHAUST FAN ON ROOF. PATCH ROOF AND CEILING.



1 1ST FLOOR HVAC DEMOLITION PLAN  
1/8" = 1'-0"

FULLY SPRINKLERED  
ISSUED FOR BID

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Bray  
Mooney  
Consulting

Project Number

3627

Scale

1/8" = 1'-0"

Drawing Title

1ST FLOOR MECHANICAL DEMOLITION PLAN

Approved: Project Director

Project Title

RENOVATE BUILDING 69

Location

1400 Black Horse Hill, Coatesville, PA

Date

03/29/13

Checked

DJR

Drawn

ORD

VA Project Number

542-CSI-203

Building Number

69

Drawing Number

MD111

Dwg. 43 of 86

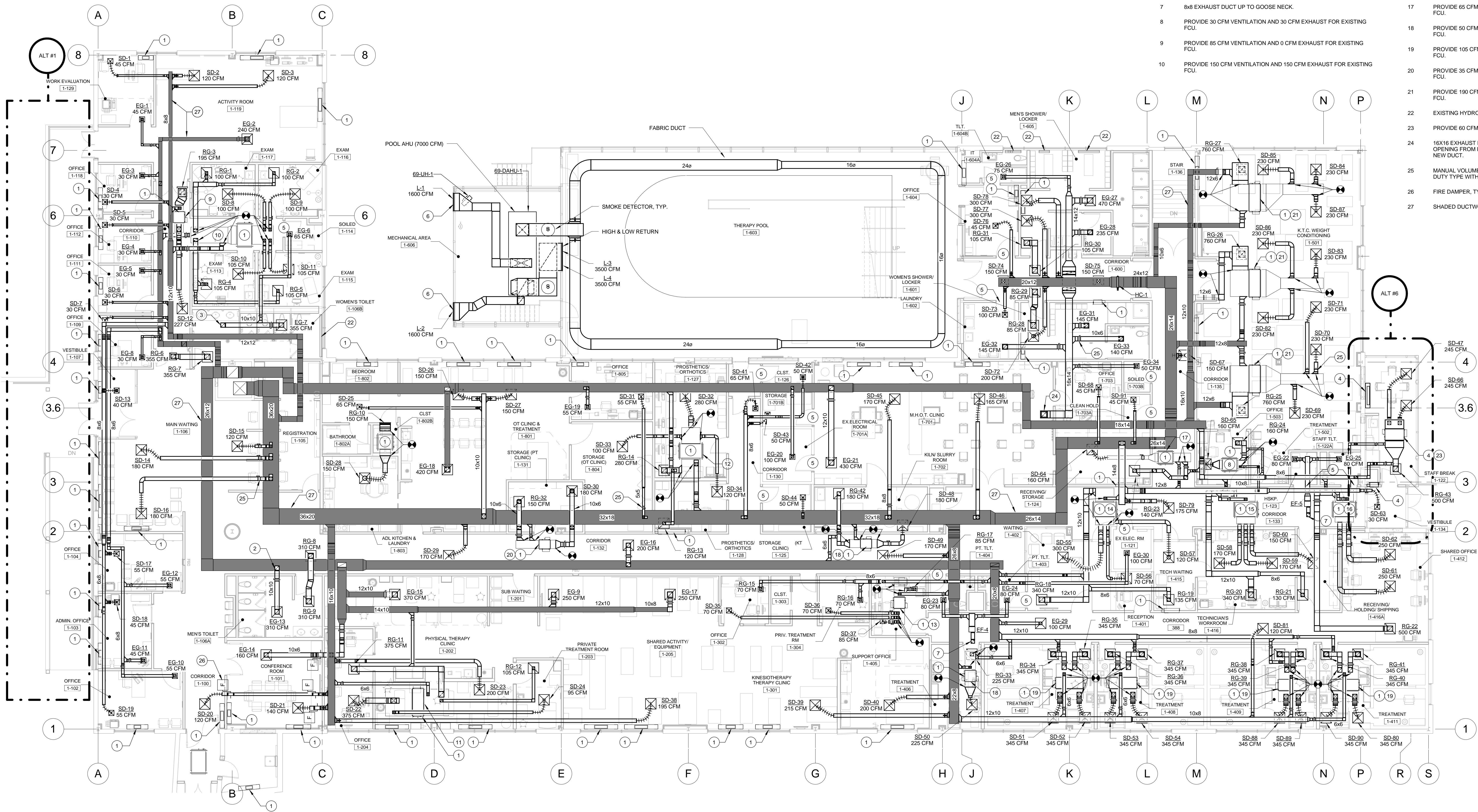
Office of  
Facilities  
Management



Department of  
Veterans Affairs



GENERAL NOTES		KEY	NOTE	KEY	NOTE
1.	ALL RUNS TO SUPPLY, RETURN, OR EXHAUST AIR TERMINALS SHALL BE THE SAME SIZE AS THE TERMINAL'S NECK SIZE UNLESS NOTED OTHERWISE.	1	EXISTING FAN COIL UNIT.	11	PROVIDE 90 CFM VENTILATION AND 100 CFM EXHAUST FOR EXISTING FCU.
2.	SEE 1-MP111 FOR THERMOSTATS LOCATION.	2	10X10 EXHAUST DUCT UP TO EF-2 ON ROOF. REUSE EXISTING ROOF OPENING FROM PREVIOUS SYSTEM. MODIFY AS NECESSARY TO FIT NEW DUCT.	12	PROVIDE 220 CFM VENTILATION AND 120 CFM EXHAUST FOR EXISTING FCU.
		3	10X10 EXHAUST DUCT UP TO EF-3 ON ROOF.	13	PROVIDE 85 CFM VENTILATION AND 85 CFM EXHAUST FOR EXISTING FCU.
		4	EXISTING FAN COIL UNIT FROM STORAGE. INSTALLED IF ALTERNATE #8 IS ACCEPTED.	14	PROVIDE 125 CFM VENTILATION AND 110 CFM EXHAUST FOR EXISTING FCU.
		5	DOOR UNDERCUT 3/4" FOR AIR TRANSFER INTO THE SPACE.	15	PROVIDE 125 CFM VENTILATION AND 105 CFM EXHAUST FOR EXISTING FCU.
		6	LOUVER TO MATCH ENCLOSURE'S PANEL SIZE. SEE ARCHITECTURAL ELEVATION FOR EXACT LOCATION. VERIFY WITH MECHANICAL ENGINEER IF LOUVER NEEDS TO BE SMALLER THAN SHOWN ON SCHEDULE BEFORE PURCHASING AND INSTALLING.	16	PROVIDE 100 CFM VENTILATION AND 100 CFM EXHAUST FOR EXISTING FCU.
		7	8x8 EXHAUST DUCT UP TO GOOSE NECK.	17	PROVIDE 65 CFM VENTILATION AND 45 CFM EXHAUST FOR EXISTING FCU.
		8	PROVIDE 30 CFM VENTILATION AND 30 CFM EXHAUST FOR EXISTING FCU.	18	PROVIDE 50 CFM VENTILATION AND 50 CFM EXHAUST FOR EXISTING FCU.
		9	PROVIDE 85 CFM VENTILATION AND 0 CFM EXHAUST FOR EXISTING FCU.	19	PROVIDE 105 CFM VENTILATION AND 105 CFM EXHAUST FOR EXISTING FCU.
		10	PROVIDE 150 CFM VENTILATION AND 150 CFM EXHAUST FOR EXISTING FCU.	20	PROVIDE 35 CFM VENTILATION AND 0 CFM EXHAUST FOR EXISTING FCU.
				21	PROVIDE 190 CFM VENTILATION AND 260 CFM EXHAUST FOR EXISTING FCU.
				22	EXISTING HYDRONIC BASEBOARD.
				23	PROVIDE 60 CFM VENTILATION AND 70 CFM EXHAUST FOR 69-FCU-2.
				24	16X16 EXHAUST DUCT UP TO EF-1 ON ROOF. REUSE EXISTING ROOF OPENING FROM PREVIOUS SYSTEM. MODIFY AS NECESSARY TO FIT NEW DUCT.
				25	MANUAL VOLUME DAMPER (MVD) TYPICAL. DAMPER SHALL BE HEAVY DUTY TYPE WITH LOCKING QUADRANT.
				26	FIRE DAMPER, TYPICAL.
				27	SHADED DUCTWORK. SEE ALT #9.



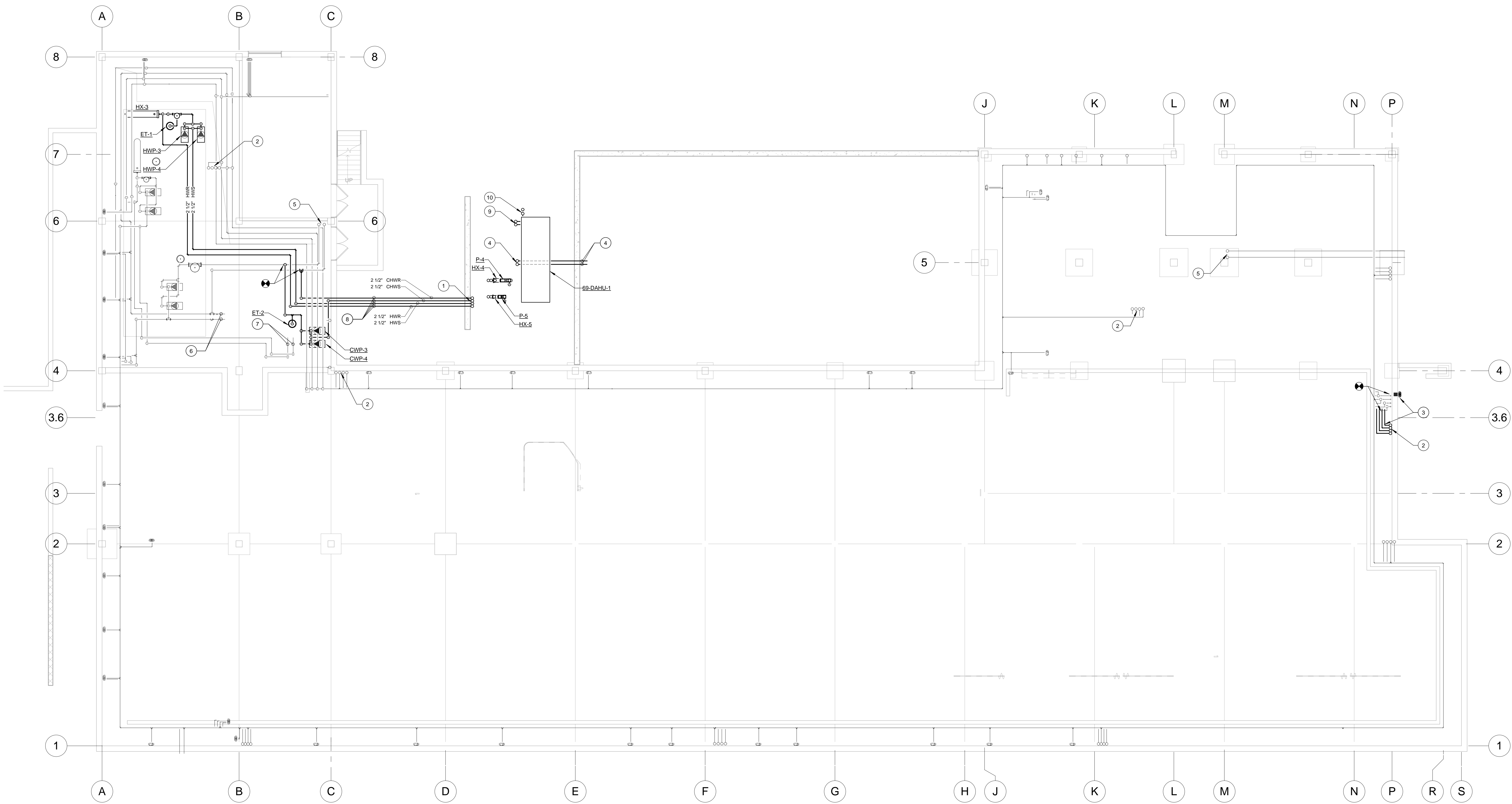
1-1st FLOOR HVAC PLAN  
1/8" = 1'-0"

FULLY SPRINKLERED  
ISSUED FOR BID

<b>CONSULTANTS:</b>										<b>PROJECT MANAGER:</b>										Project Number 3627		Scale 1/8" = 1'-0"		Drawing Title 1ST FLOOR HVAC PLAN		Project Title RENOVATE BUILDING 69		VA Project Number 542-CSI-203		Office of Facilities Management	
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Revisions		Date																Date 03/29/13		Checked DJR		Drawn ORD		 Department of Veterans Affairs							



KEY	NOTE
1	2 1/2" CHWS/R AND 2 1/2" HWS/R TO POOL MECHANICAL ROOM. SEE 1-MP111 FOR CONTINUATION.
2	HYDRONIC PIPING UP TO ABOVE CEILING IN 1ST FLOOR. SEE 1-MP111 FOR CONTINUATION.
3	CONNECT TO EXISTING 1" HWS/R AND 1" CHWS/R STUBS.
4	1" HWS/R TO RADIANT FLOOR IN POOL ENCLOSURE.
5	EXISTING 6" CHWS/R TO ABOVE 1ST FLOOR CEILING.
6	EXISTING 2" CHWS/R TO EXISTING AIR HANDLING UNIT IN BASEMENT.
7	EXISTING 3/4" HWS/R TO UNIT HEATER.
8	PIPE IN TRENCH.
9	2 1/2" CHWS/R TO AHU CHILLED WATER COIL (69-CHWC-1).
10	1 1/2" HWS/R TO AHU HOT WATER COIL (69-HC-1).



1 BASEMENT HYDRONIC PLAN  
1/8" = 1'-0"

FULLY SPRINKLERED  
ISSUED FOR BID

CONSULTANTS:										PROJECT MANAGER:		Project Number 3627	Scale 1/8" = 1'-0"	Drawing Title BASEMENT HYDRONIC PLAN	Project Title RENOVATE BUILDING 69	VA Project Number 542-CSI-203	Office of Facilities Management  
Project Manager BRAY MOONEY CONSULTING		Architect ARRAY HEALTHCARE FACILITIES SOLUTIONS	Structural Engineer WZG, STRUCTURAL CONSULTING ENGINEERS	MEP/FP Engineer APOGEE CONSULTING GROUP	Civil Engineer GUIDON DESIGN	Fire Protection Consultant HARRINGTON GROUP	Cost Estimator BRAY MOONEY CONSULTING	Aquatic Consultant ATLANTIC AQUATIC ENGINEERING	Associate Architects W. COOK ARCHITECTS								
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Revisions		Date								Date 03/29/13	Checked DJR	Drawn ORD					



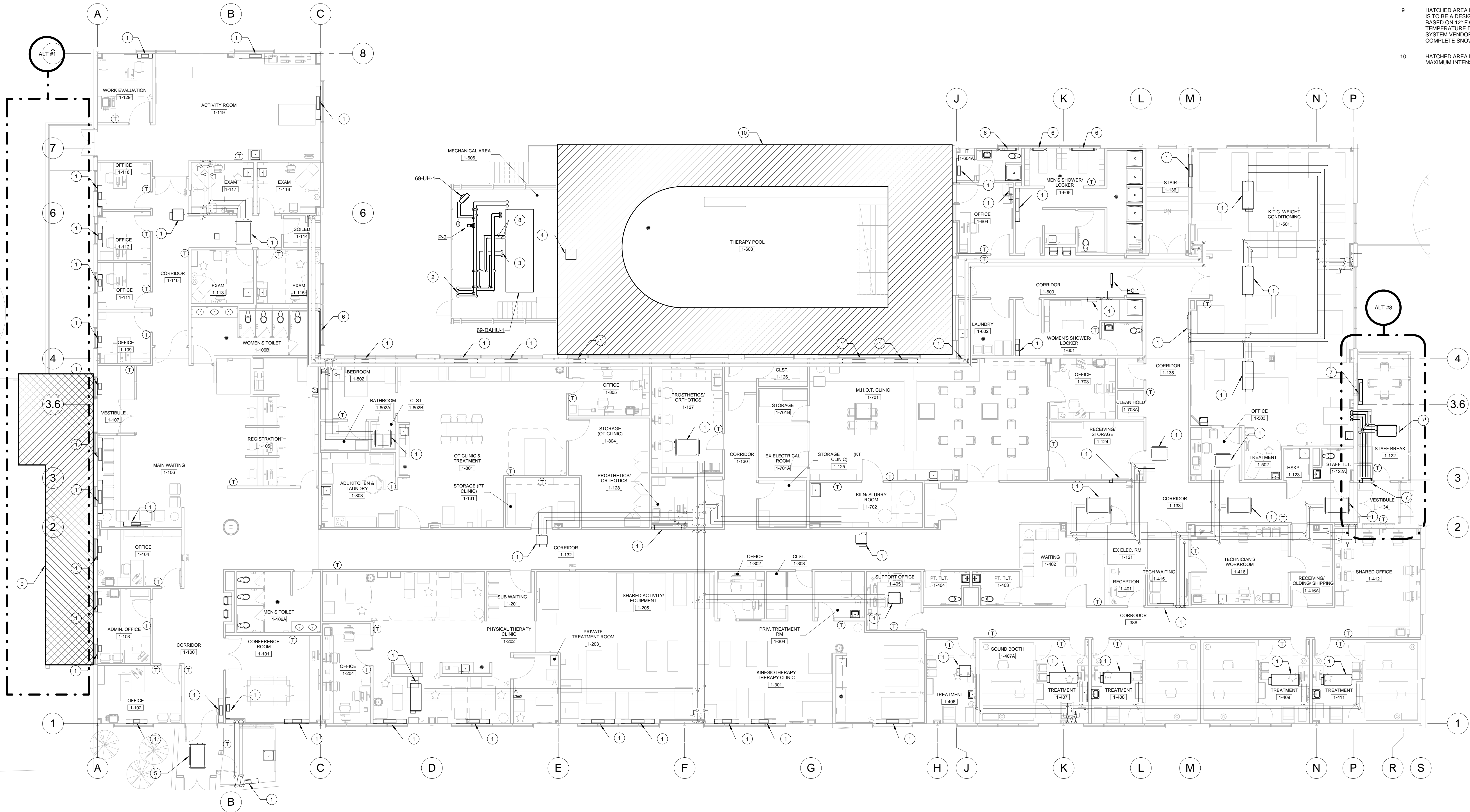
GENERAL NOTES

1. ALL EXISTING FAN COIL UNITS SHALL REMAIN BALANCED AS THE PREVIOUS PROJECT UNLESS NOTED OTHERWISE.

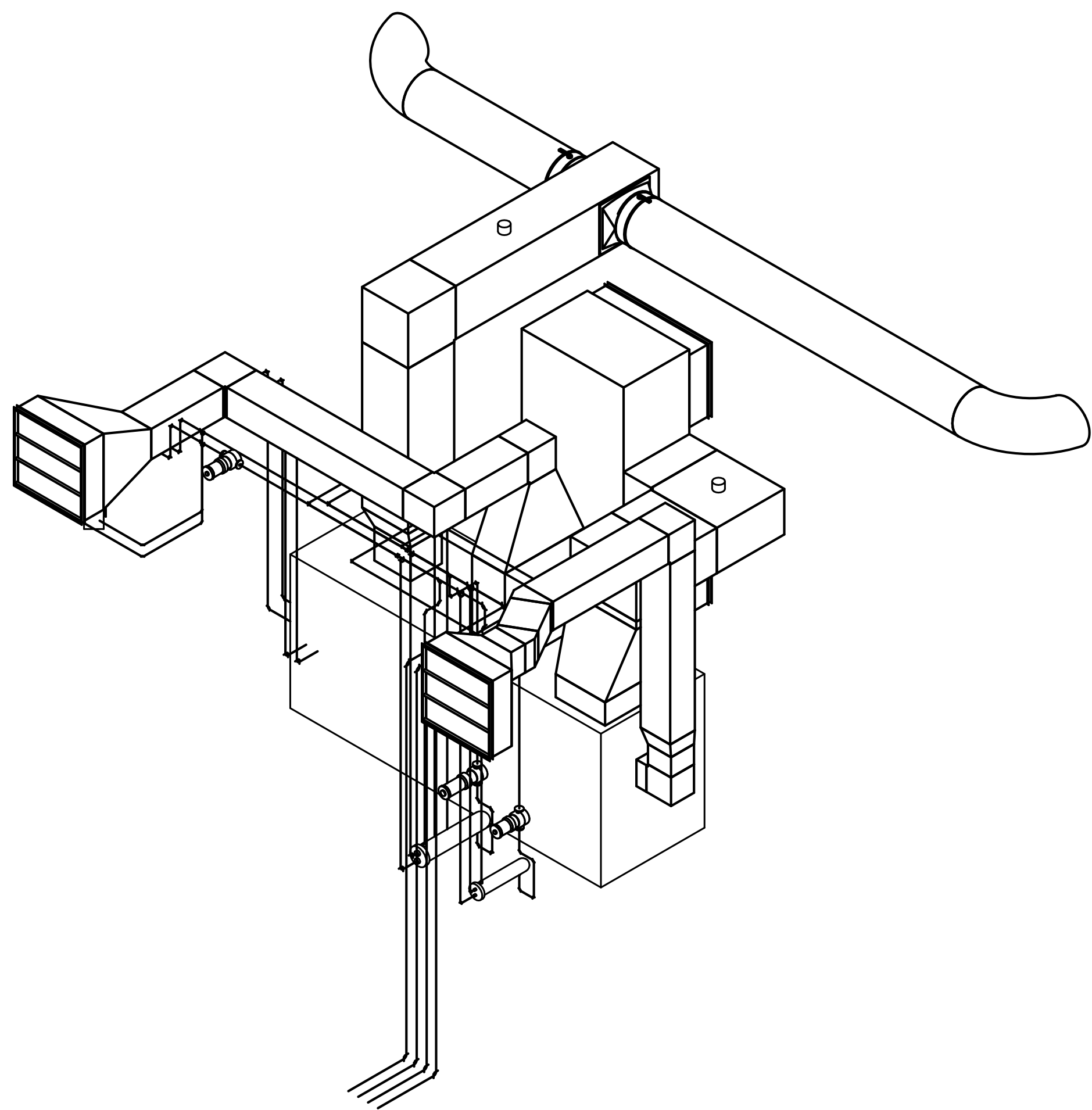
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NOTE

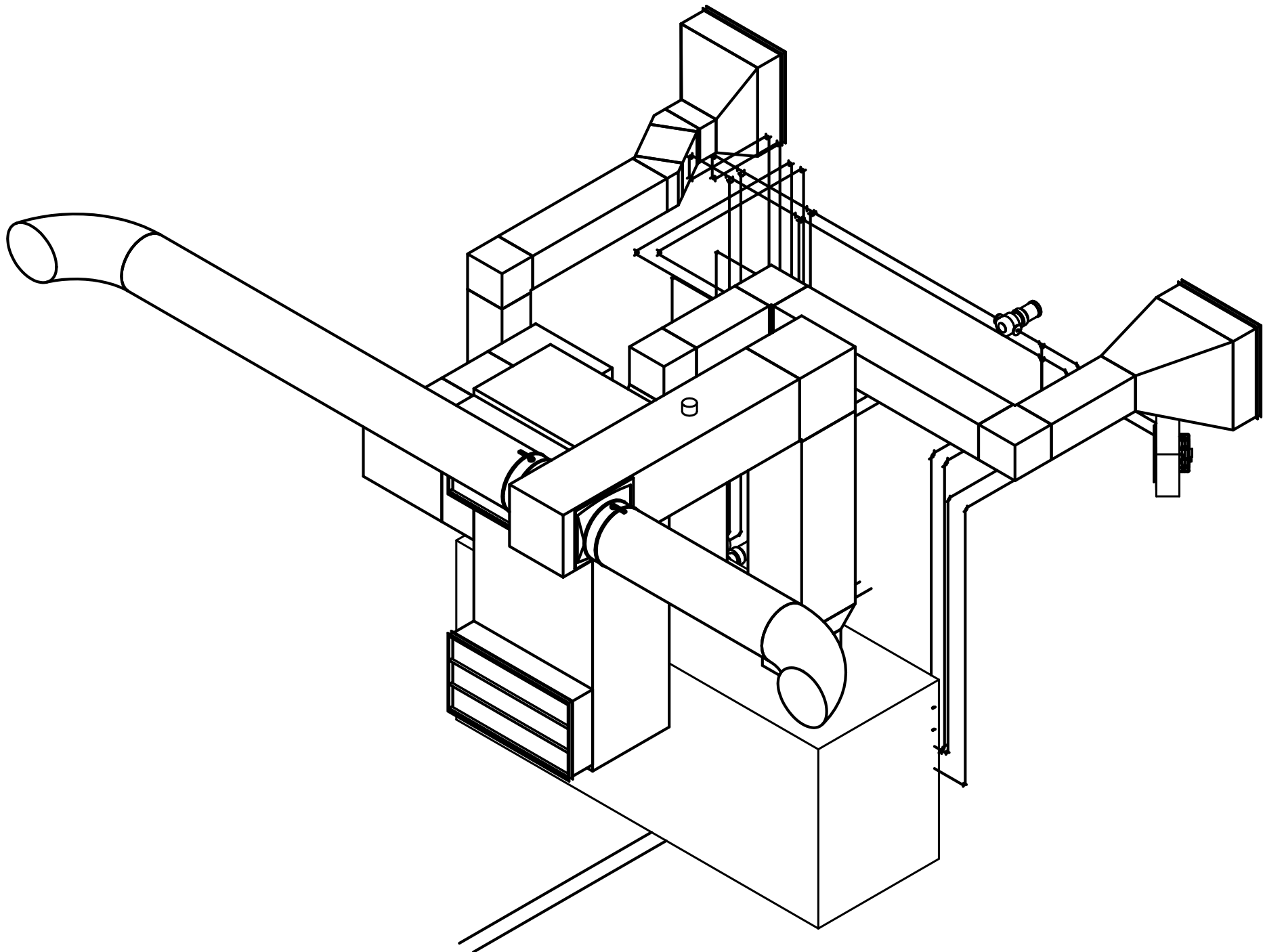
- 1 EXISTING FAN COIL UNIT.  
2 2 1/2" CHWS/R AND 2 1/2" HWS/R FROM MAIN MECHANICAL ROOM. SEE 1-MP101 FOR CONTINUATION.  
3 1" HWS/R DOWN UNDER SLAB TO RADIANT FLOOR MANIFOLD.  
4 FLOOR ACCESS PANEL FOR RADIANT FLOOR MANIFOLD.  
5 EXISTING UNIT HEATER SERVING PASSAGE WAY.  
6 EXISTING HYDRONIC BASEBOARD.  
7 EXISTING FAN COIL UNIT FROM STORAGE. INSTALLED IF ALTERNATE #8 IS ACCEPTED.  
8 POOL WATER HEATING SYSTEM.  
9 HATCHED AREA DENOTES SNOW MELT SYSTEM. SNOW MELT SYSTEM IS TO BE A DESIGN BUILD SYSTEM. BASIS OF DESIGN SHALL BE BASED ON 12° F OUTSIDE AIR TEMPERATURE, 20° F WATER TEMPERATURE DROP AND 30% PROPYLENE GLYCOL. SNOW MELT SYSTEM VENDOR SHALL BE RESPONSIBLE FOR THE DESIGN OF A COMPLETE SNOW MELT SYSTEM.  
10 HATCHED AREA DENOTES IN SLAB RADIANT FLOOR ON POOL DECK. MAXIMUM INTENSITY = 17 BTU/HR \* SQ. FT.



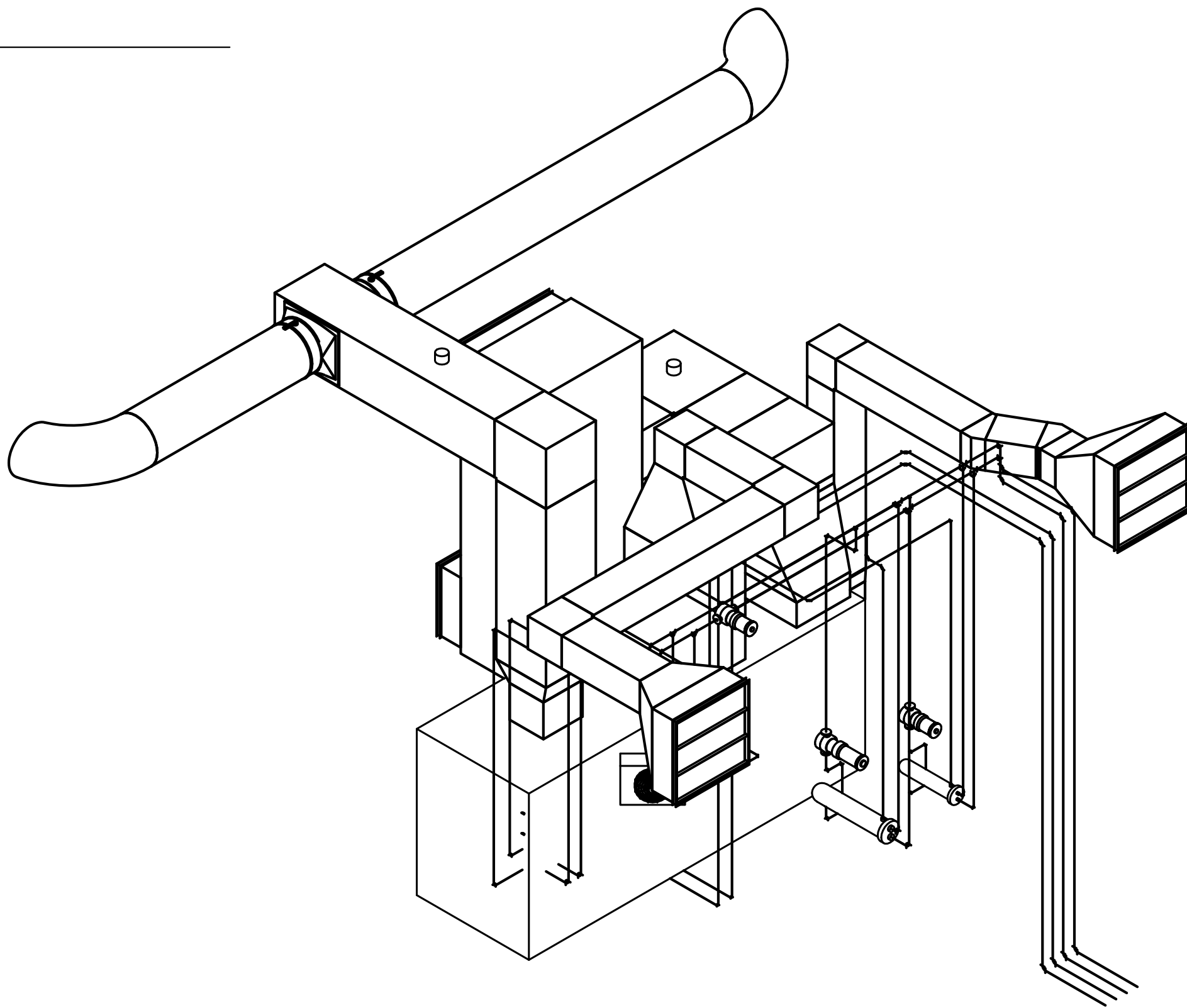




1 MECHANICAL POOL ENCLOSURE SW VIEW



2 MECHANICAL POOL ENCLOSURE NE VIEW



3 MECHANICAL POOL ENCLOSURE NW VIEW

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PROJECT MANAGER:

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Mooney  
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Project Number

3627

Scale

Drawing Title

MECHANICAL POOL ENCLOSURE 3D VIEWS

Project Title

RENOVATE BUILDING 69

VA Project Number

542-CSI-203

Building Number

69

Drawing Number

MH401

Dwg. 47 of 86

Office of  
Facilities  
Management



Department of  
Veterans Affairs

Approved: Project Director

Location

1400 Black Horse Hill, Coatesville, PA

Date

03/29/13

Checked

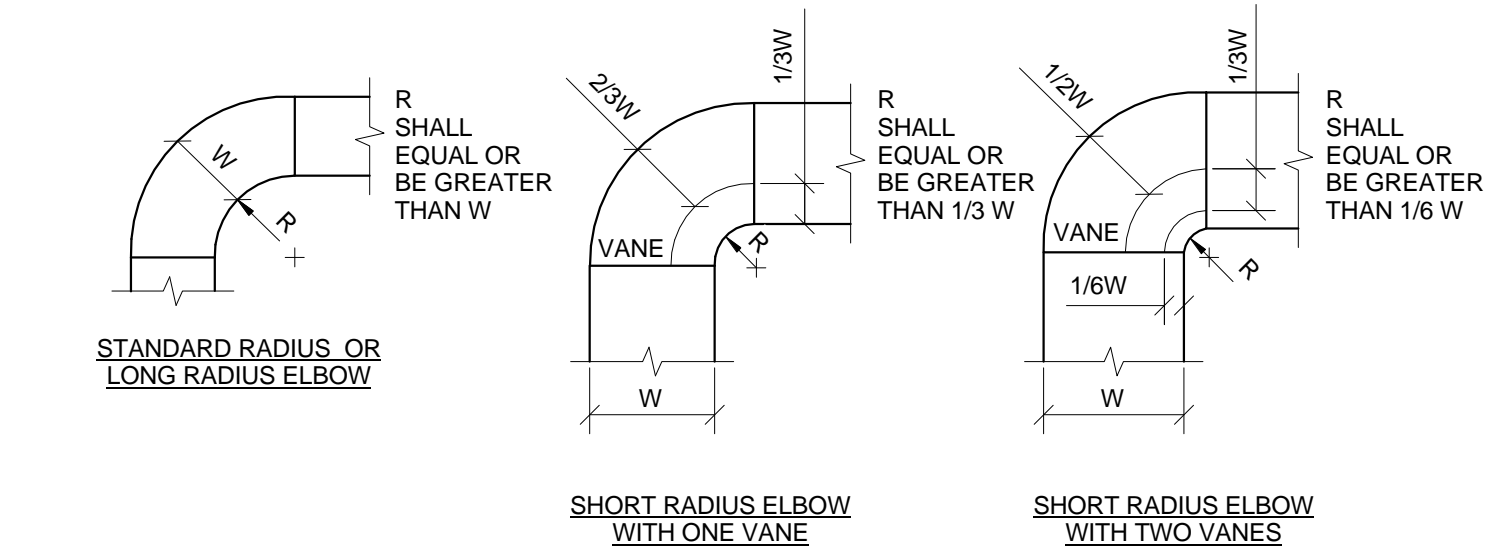
DJR

Drawn

ORD

Revisions Date

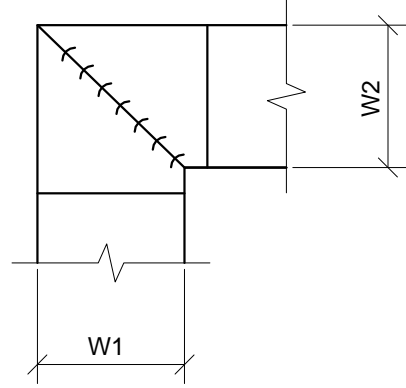




NOTES:

- THE INTERIOR SURFACE OF ALL RADIUS ELBOWS SHALL BE MADE ROUND.
- ALL STANDARD ELBOWS CAN BE SUBSTITUTED WITH SHORT RADIUS ELBOWS. ALL SHORT RADIUS ELBOWS SHALL HAVE VANES. VANES SHALL BE CONSTRUCTED, SUPPORTED AND FASTENED AS RECOMMENDED BY SMACNA.

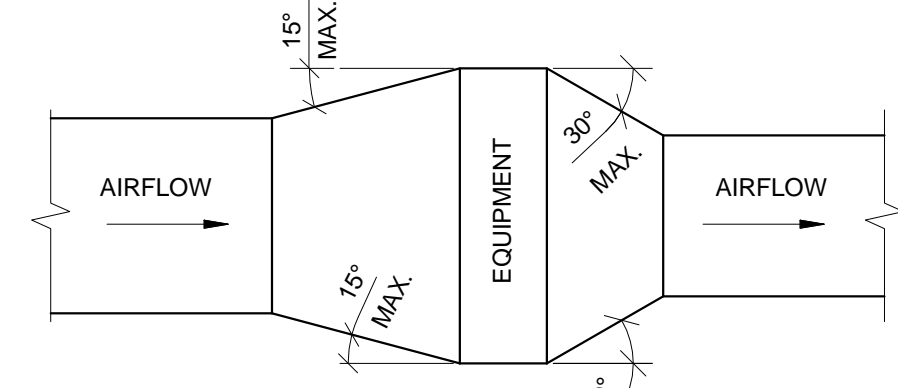
1 DUCTWORK RADIUS ELBOW  
N.T.S.



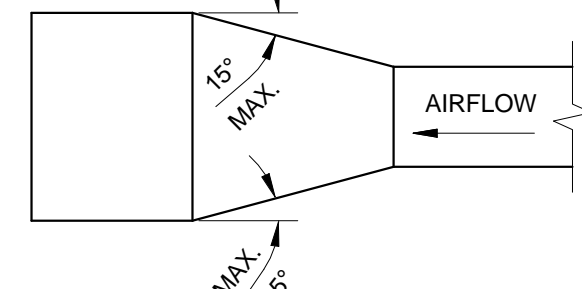
NOTES:

- ALL VANE ELBOWS SHALL BE CONSTRUCTED AND INSTALLED AS DETAILED BY SMACNA.
- WHEN W1 DOES NOT EQUAL W2, VANE SHALL BE SINGLE THICKNESS VANE TYPE REGARDLESS OF W DIMENSION.
- ALL SINGLE THICKNESS VANES SHALL HAVE A 2" RADIUS, 1-1/2" MAXIMUM SPACE BETWEEN VANES AND A 3/4" TRAILING EDGE.
- WHEN W EQUAL W2 AND W1 IS GREATER THAN 20" VANES SHALL BE DOUBLE VANE TYPE.

2 DUCTWORK SQUARE VANE ELBOWS  
N.T.S.



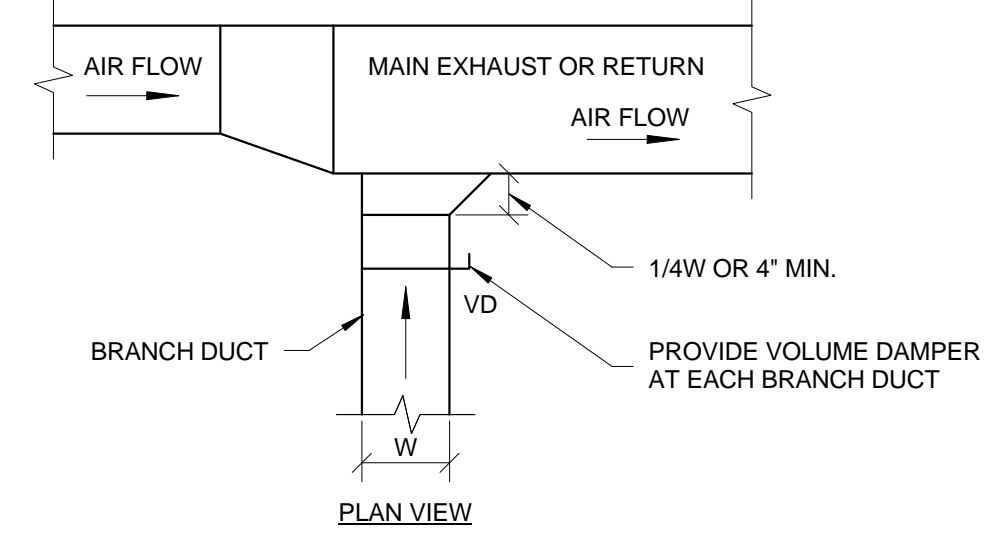
TYPICAL DUCTWORK TRANSITION WITH EQUIPMENT  
MOUNTED IN DUCT PLAN OR SIDE VIEW



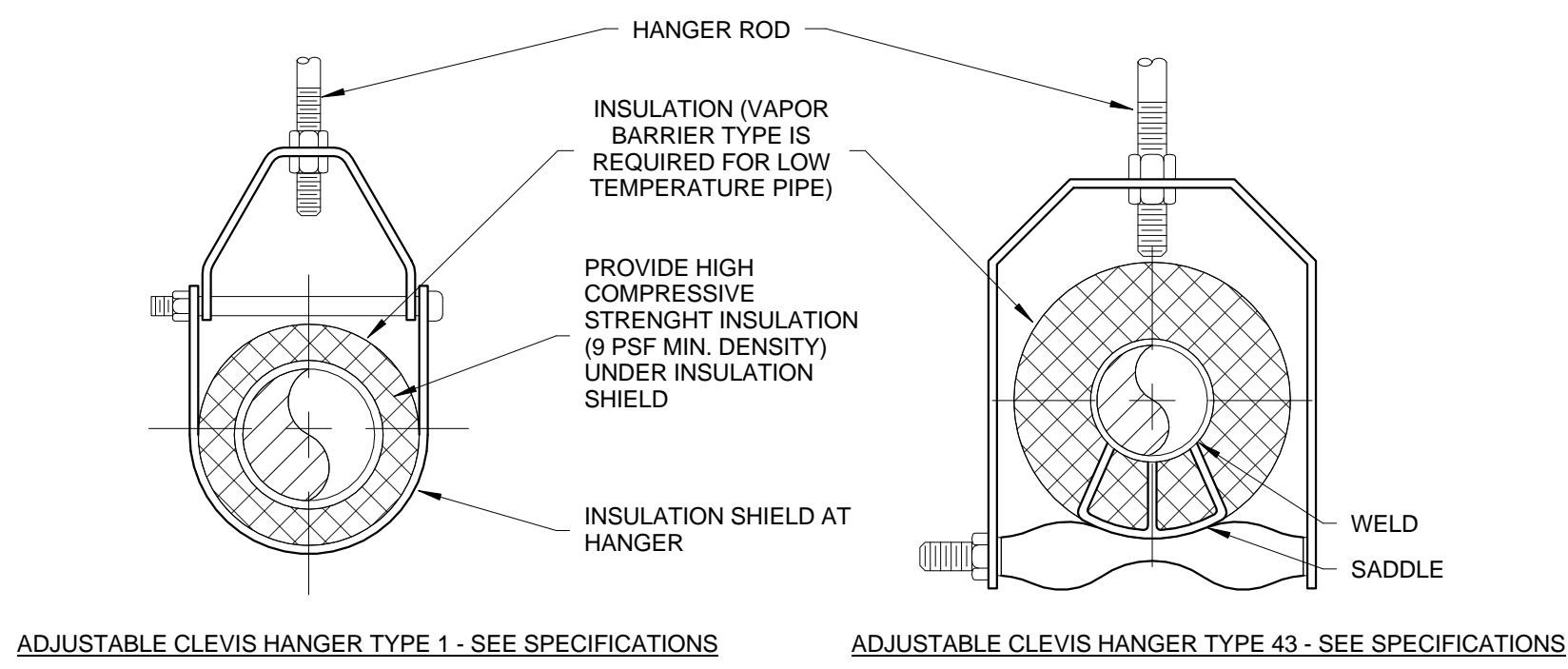
TYPICAL DUCTWORK TRANSITION  
PLAN OR SIDE VIEW

NOTE:  
UNLESS OTHERWISE INDICATED ON PLANS, MAXIMUM ANGLES SHOWN SHALL APPLY.

3 DUCTWORK TRANSITIONS (WITH EQUIPMENT MOUNTED IN DUCT)  
N.T.S.

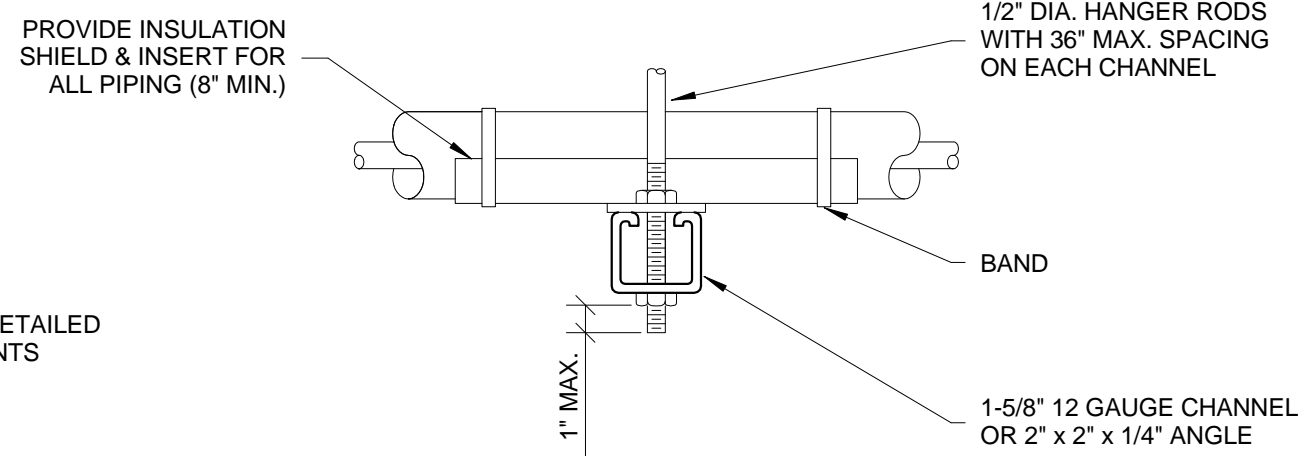


4 EXHAUST OR RETURN BRANCH DUCTWORK  
N.T.S.



ADJUSTABLE CLEVIS HANGER TYPE 1 - SEE SPECIFICATIONS

ADJUSTABLE CLEVIS HANGER TYPE 43 - SEE SPECIFICATIONS

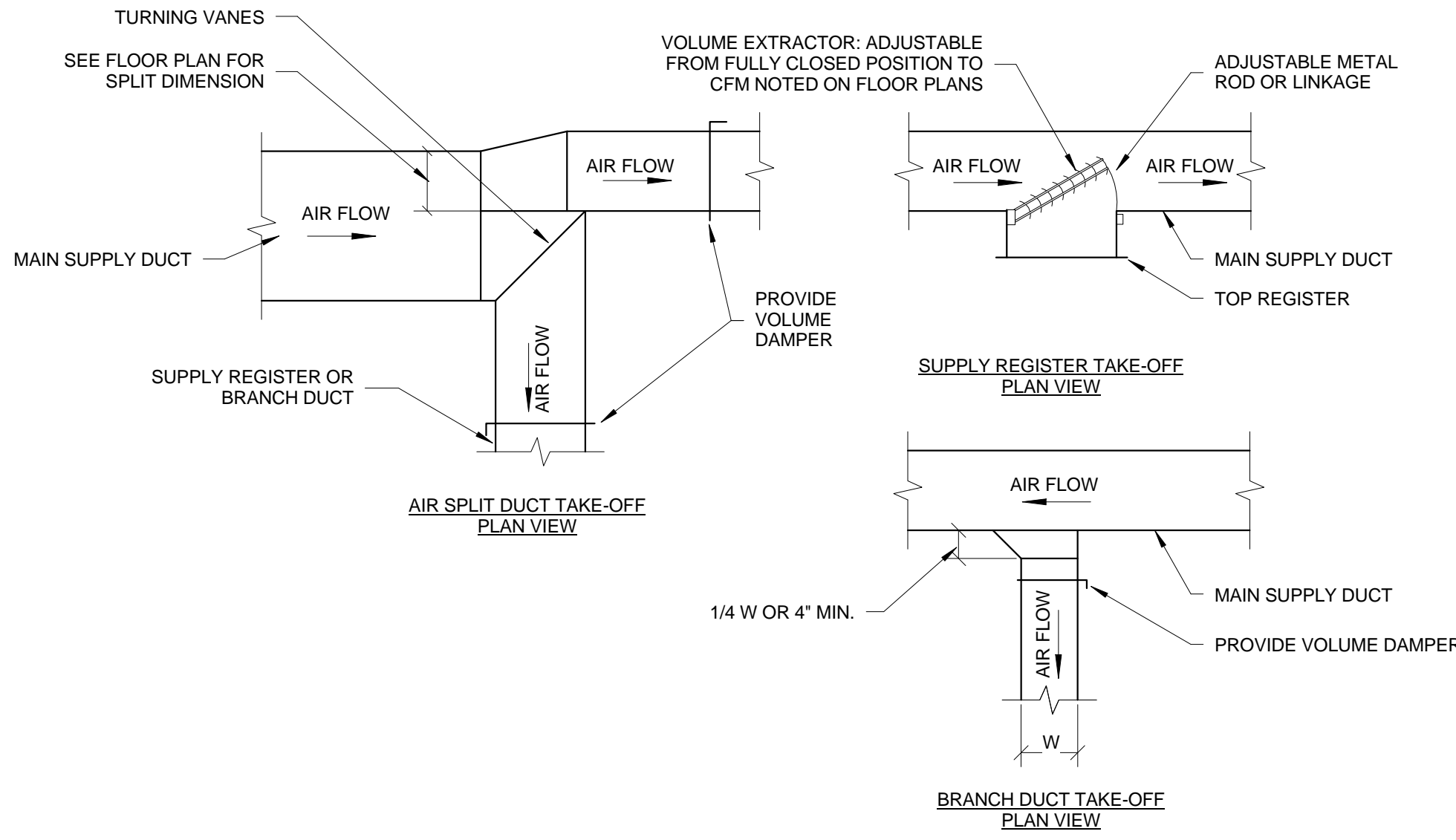


SIDE VIEW TRAPEZE HANGER FOR  
UP TO 1000 LB. UNIFORM LOAD

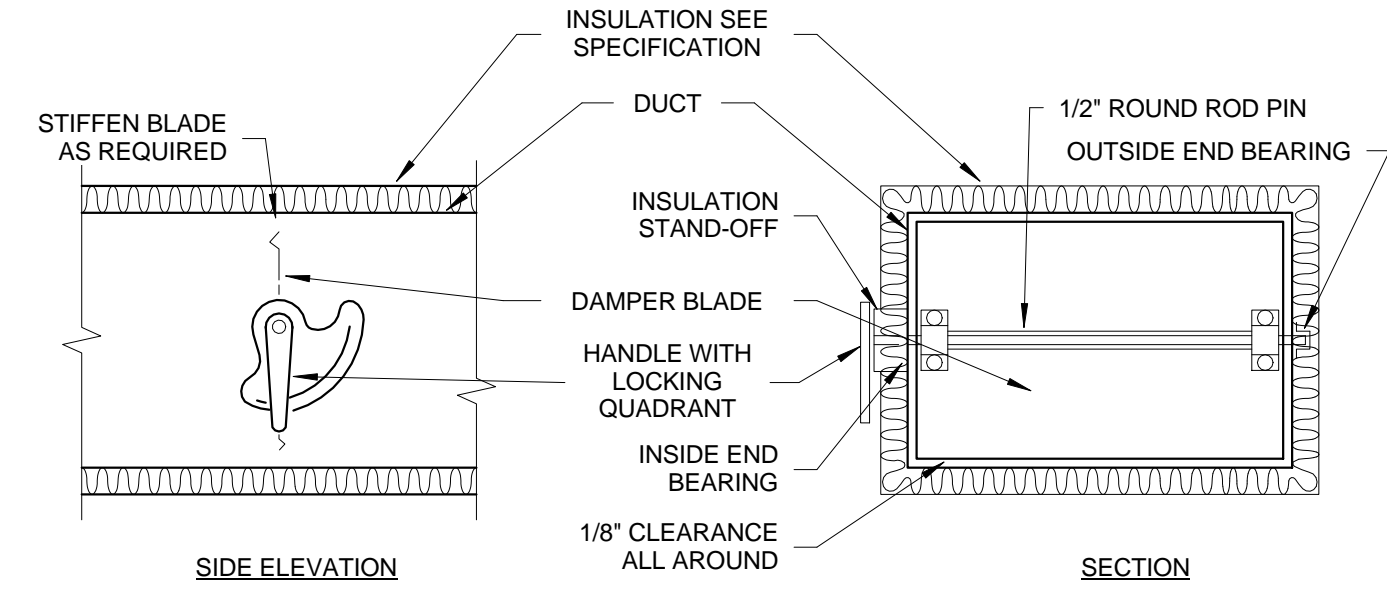
MAXIMUM PIPE/TUBING SUPPORT SPACING																							
NOM. SIZE (IN.)	THRU 3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24					
PIPE (FT.)	7	7	7	9	10	11	12	14	16	17	19	22	23	25	27	28	30	32					
TUBING (FT.)	5 FT	6	7	8	8	9	10	12	13	14	16	-	-	-	-	-	-	-					

NOTE: FOR TRAPEZE HANGER TAKE SPACING OF SMALLEST SIZE ON TRAPEZE

5 PIPE HANGER  
N.T.S.



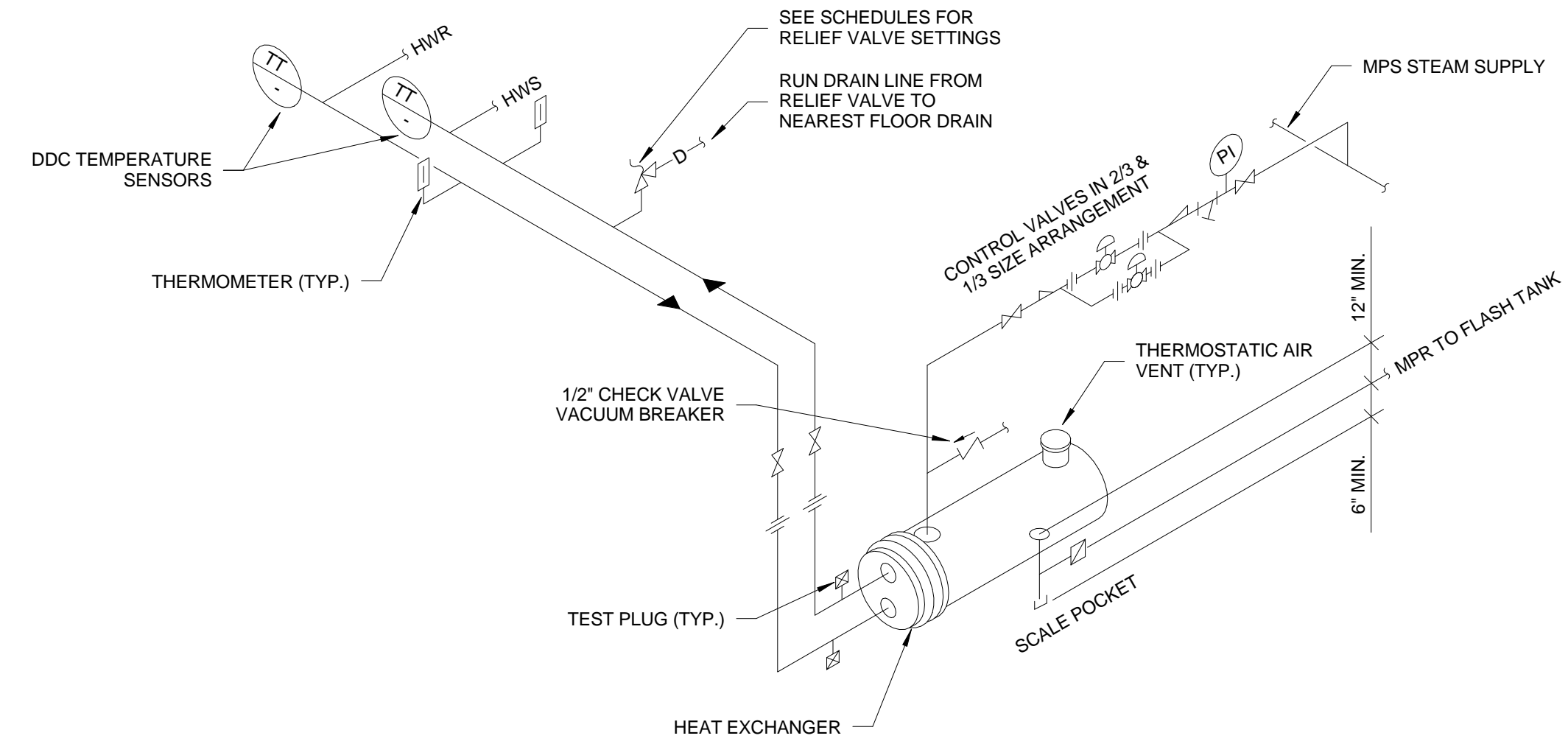
6 SUPPLY DUCT TAKE-OFFS  
N.T.S.



NOTES:

- DELETE INSULATION STAND-OFF ON DUCTWORK WITHOUT EXTERIOR INSULATION.
- DETAIL SHOWS SINGLE BLADE DAMPER. DAMPER INSTALLATION SHALL BE SIMILAR FOR MULTI-BLADE DAMPERS & ROUND DAMPERS.

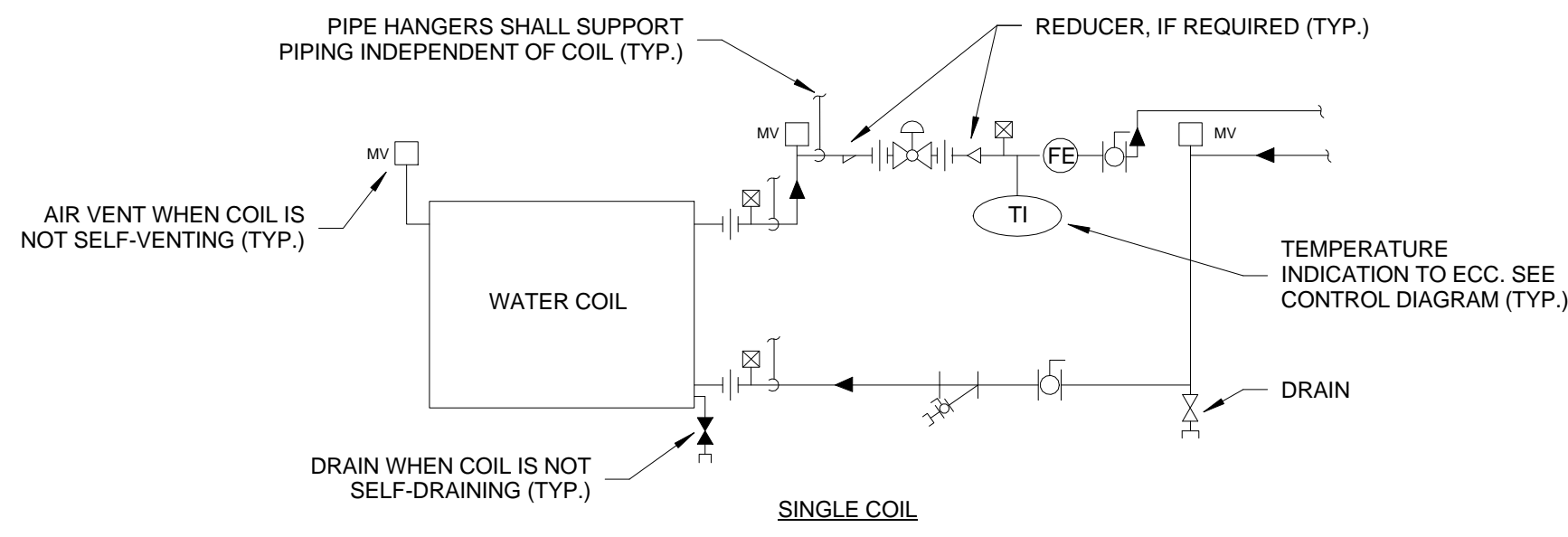
7 VOLUME DAMPER DETAIL  
N.T.S.



NOTES:

- PROVIDE SADDLE SUPPORTS AND LEGS OR HANGERS FOR HEAT EXCHANGER. MOUNTING HEIGHT TO SHALL BE ADJUSTED TO FACILITATE GRAVITY RETURN OR STEAM CONDENSATE.
- MAKE THE BYPASS THE SAME SIZE AS THE CONNECTIONS TO THE CONTROL VALVES.
- CONTROL VALVES SHALL BE IN A 1/3 AND 2/3 SIZE ARRANGEMENT.

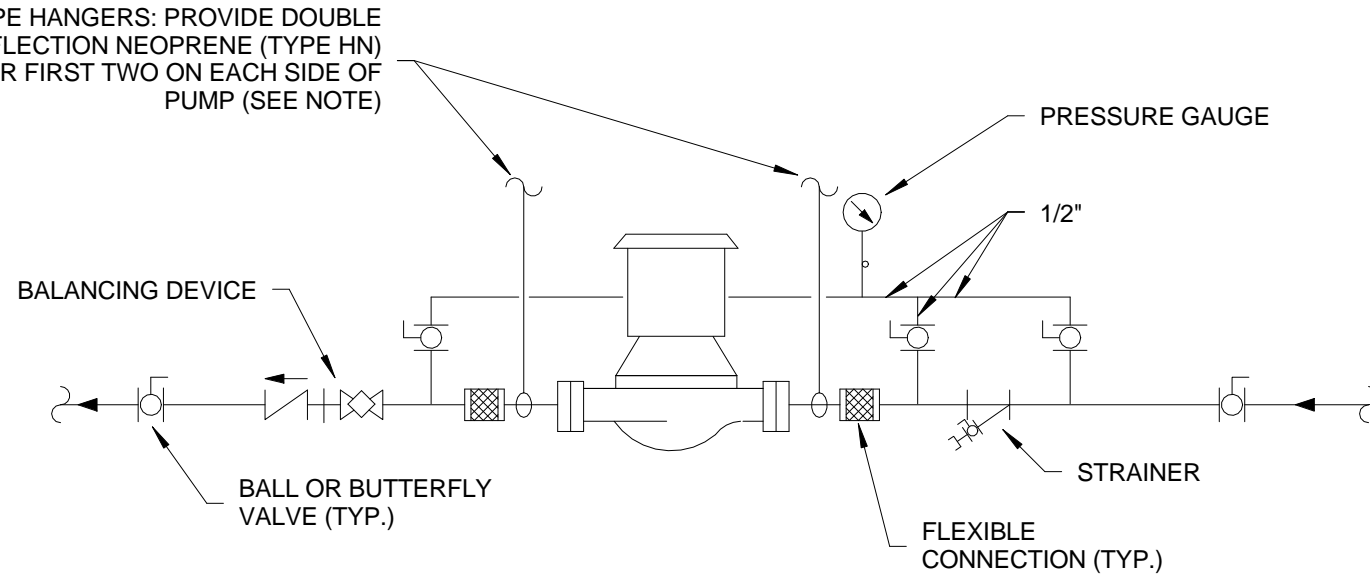
9 HEAT EXCHANGER - STEAM TO HOT WATER  
N.T.S.



NOTES:

- WHEN COIL IS INCLUDED IN CASING MOUNTED ON VIBRATION ISOLATORS THE FIRST TWO HANGERS FOR EACH PIPE SHALL BE SPRING & NEOPRENE TYPE, TYPE "H" 4" DIA. PIPE & SMALLER, TYPE "H-P" FOR 5" DIA. PIPE & LARGER.
- PIPING SHALL BE INSTALLED IN SUCH A MANNER THAT IT WILL NOT BLOCK THE SWING OR USE OF ACCESS DOORS OR PANELS; NEITHER SHALL IT BLOCK THE SERVICING OF FILTERS, VALVES, OR EQUIPMENT.
- THE FLOW ELEMENT MAY BE INSTALLED IN THE SUPPLY PIPING REQUIRED MINIMUM UPSTREAM AND DOWNSTREAM DIMENSIONS CANNOT BE OBTAINED IN THE RETURN PIPING.

8 WATER COILS - PIPING CONNECTIONS  
N.T.S.



NOTE:  
SUPPORT PUMP FROM PIPING ONLY. DO NOT SUPPORT PUMP FROM MOTOR.

10 INLINE PUMP CONNECTIONS  
N.T.S.

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PROJECT MANAGER:

Project Number  
3627

Scale  
N.T.S.

Bray  
Mooney  
Consulting

Drawing Title

MECHANICAL DETAILS

Approved: Project Director

Project Title

RENOVATE BUILDING 69

Location

1400 Black Horse Hill, Coatesville, PA

Date

03/29/13

Checked

DJR

Drawn

ORD

VA Project Number

542-CSI-203

Building Number

69

Drawing Number

MH501

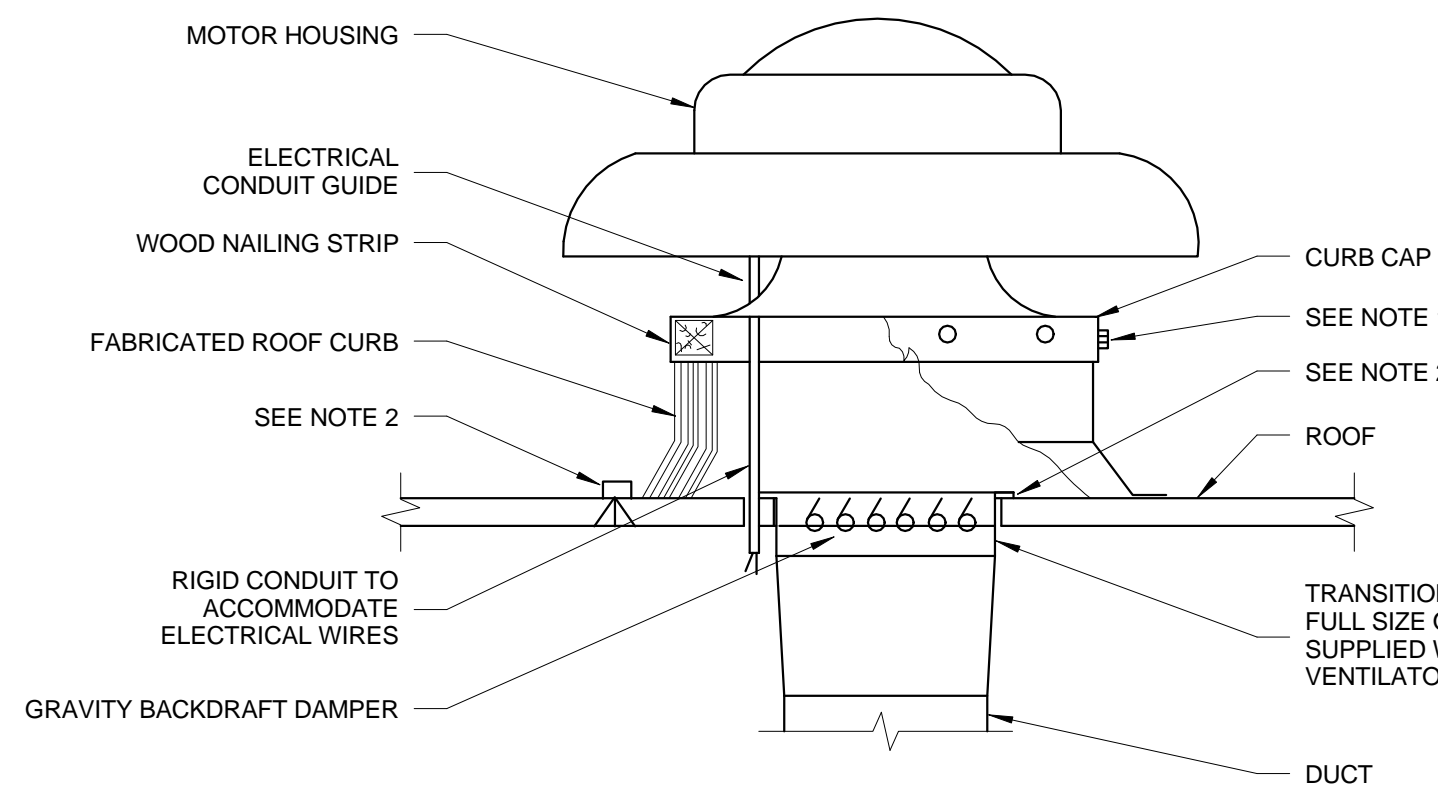
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Office of  
Facilities  
Management

Department of  
Veterans Affairs

FULLY SPRINKLERED  
ISSUED FOR BID

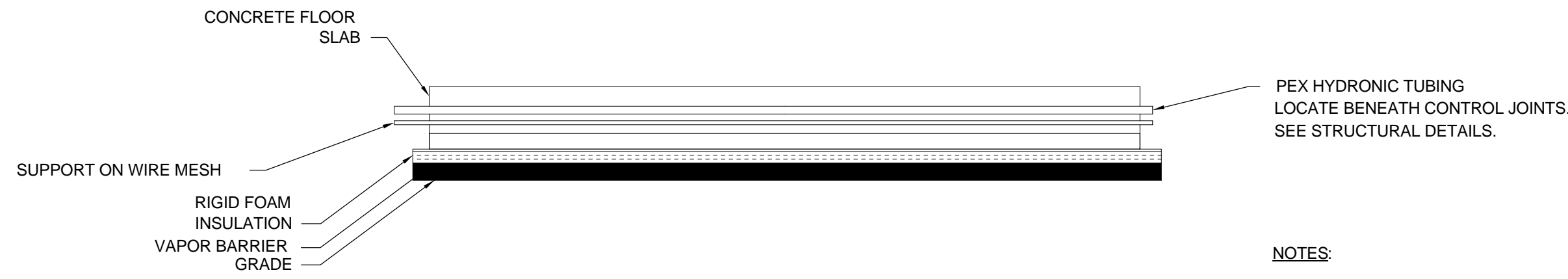




NOTES:

1. SECURE CURB CAP TO WOOD NAILING STRIP WITH 3/8" CADIUM PLATED LAG BOLTS NOT OVER 12" ON CENTER.
2. SECURE ROOF CURB, DUCTWORK AND DAMPER TO ROOF WITH EXPANSION BOLTS (CONCRETE ROOF) OR RUST RESISTANT BOLTS (METAL DECK AND BAR JOIST ROOF).
3. RUN ELECTRICAL LINES THROUGH CLEARANCE HOLE PROVIDED IN GRAVITY DAMPER, THEN THROUGH VENTILATOR ELECTRICAL CONDUIT GUIDE.

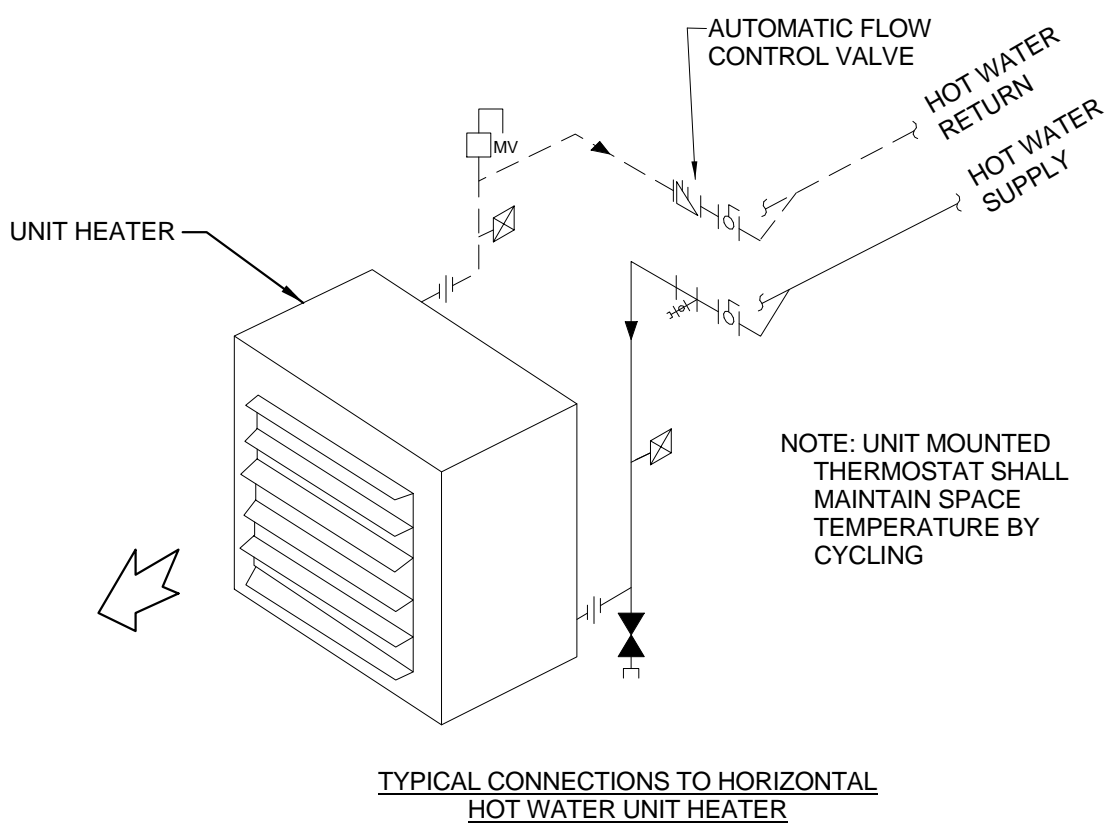
1 POWER TYPE ROOF VENTILATOR  
N.T.S.



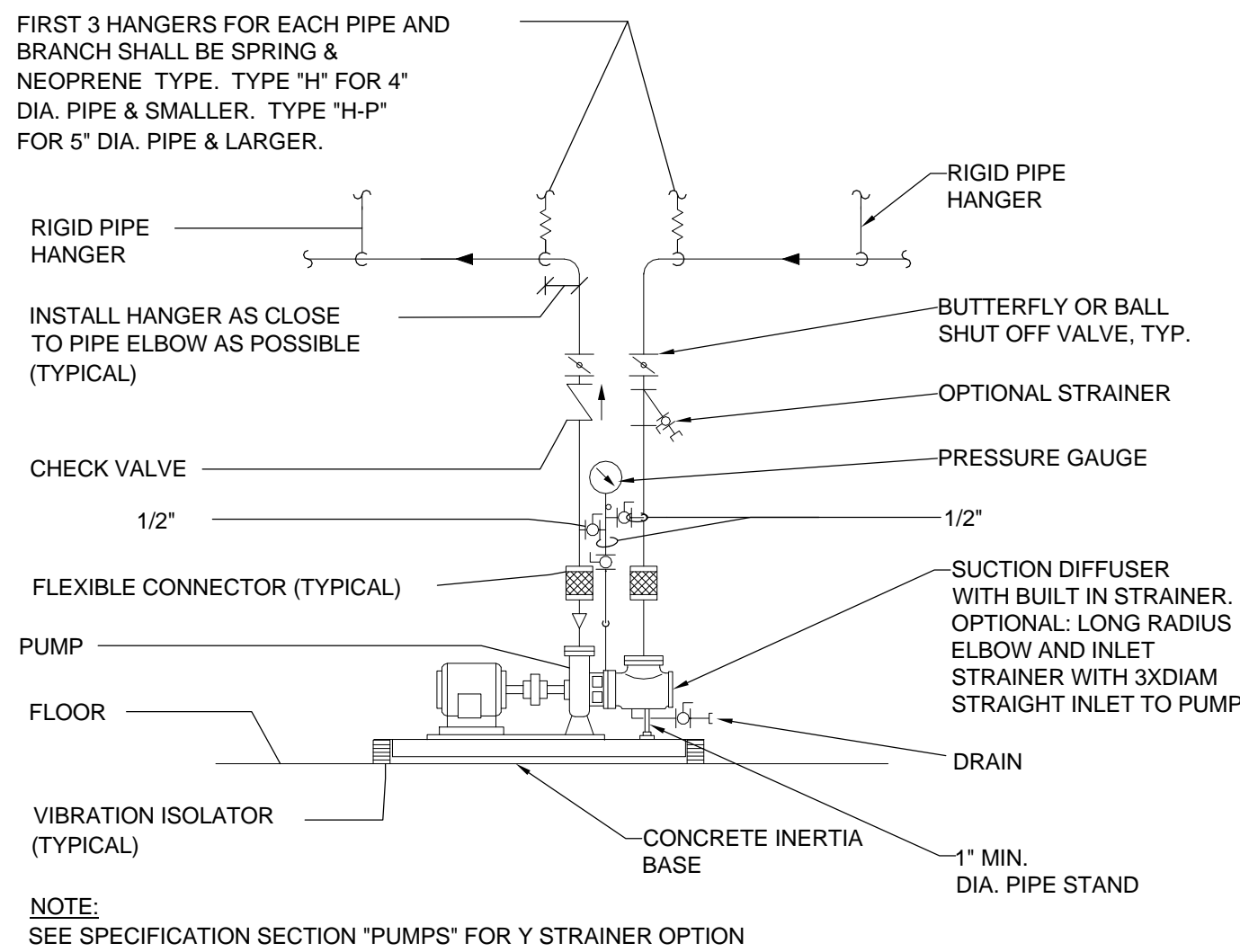
NOTES:

1. FLOOR CONSTRUCTION DETAILS AND MATERIALS ARE SHOWN SCHEMATICALLY. REFER TO ARCHITECTURAL AND STRUCTURAL FLOOR PLANS AND DETAILS FOR EXACT DETAILS AND SPECIFICATIONS.
2. VAPOR BARRIER MUST BE INSTALLED BETWEEN BASE AND RIGID FOAM INSULATION. VAPOR BARRIER SHALL BE MINIMUM 6 MIL. POLY.

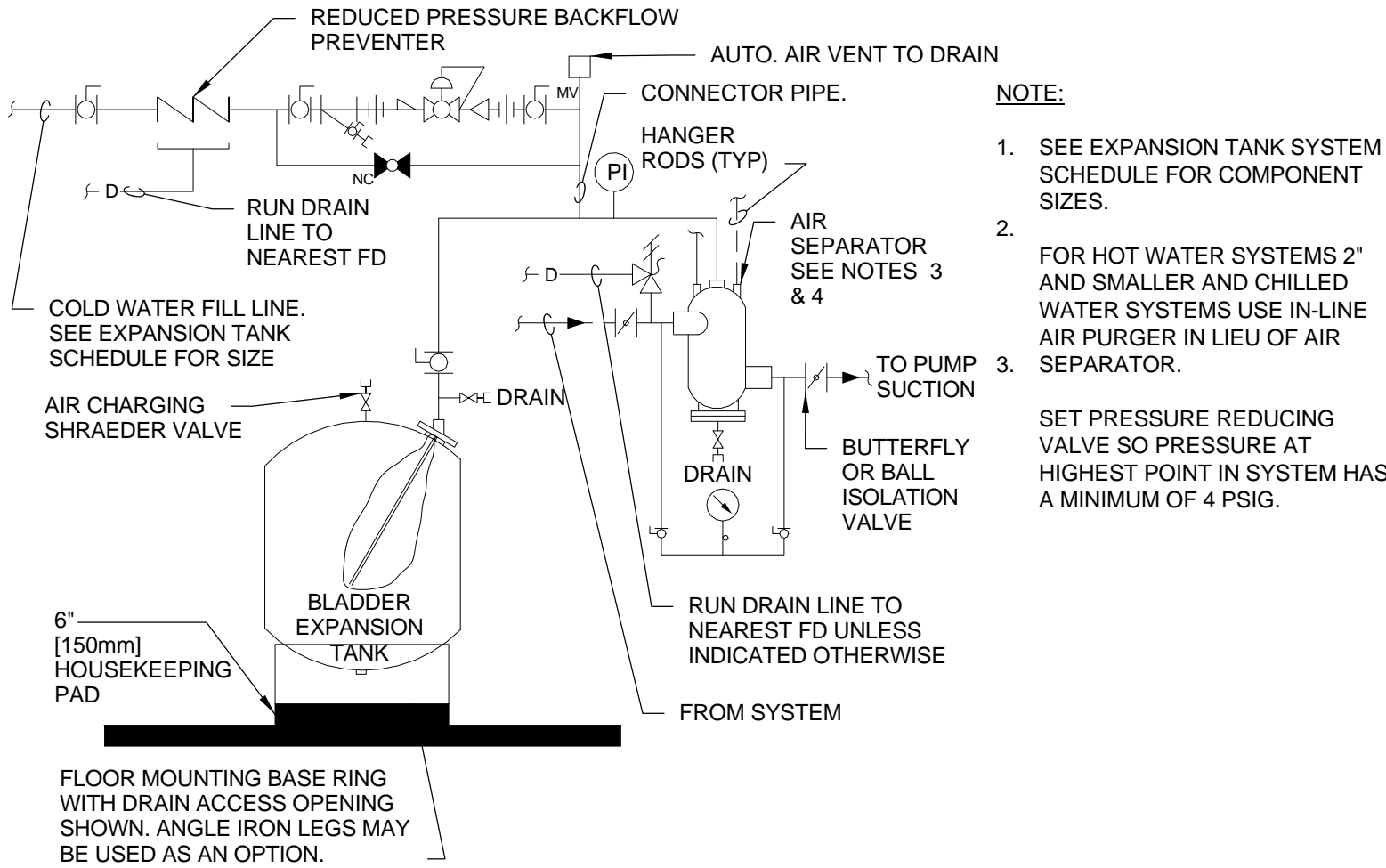
4 HYDRONIC HEATING SLAB  
N.T.S.



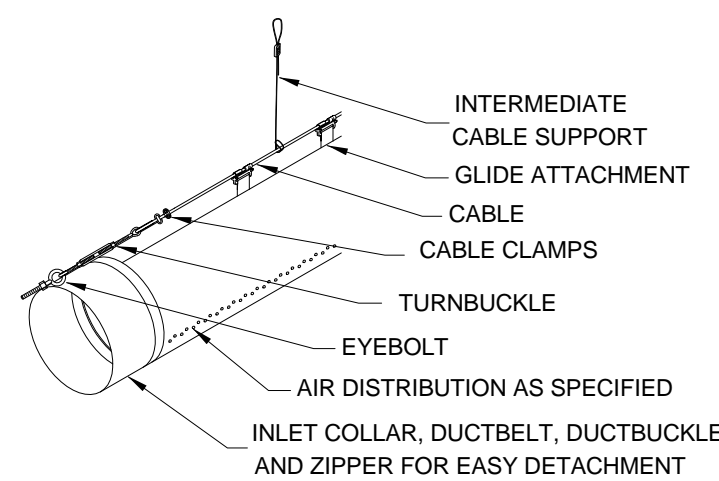
2 UNIT HEATER (HOT WATER) - PIPING CONNECTIONS  
N.T.S.



5 SINGLE SUCTION FLOOR MOUNTED PUMPS  
N.T.S.



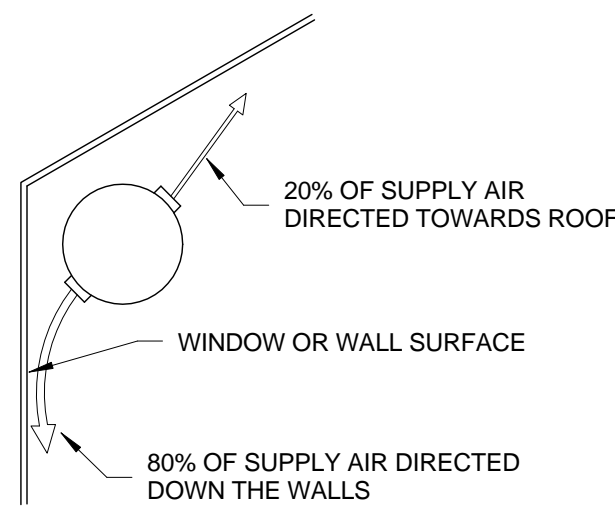
3 FLOOR MOUNTED EXPANSION TANK - PIPING CONNECTIONS  
N.T.S.



NOTES:

1. 1 ROW CABLE SUSPENSION AT 12 O'CLOCK

6 FABRIC DUCT SUSPENSION DETAIL  
N.T.S.



7 FABRIC DUCT AIR DISTRIBUTION  
N.T.S.

FULLY SPRINKLERED  
ISSUED FOR BID

<b>CONSULTANTS:</b>										<b>PROJECT MANAGER:</b>		Project Number 3627	Scale As indicated	Drawing Title <b>MECHANICAL DETAILS</b>	Project Title <b>RENOVATE BUILDING 69</b>	VA Project Number 542-CSI-203	<b>Office of Facilities Management</b>  
<b>Project Manager</b> BRAY MOONEY CONSULTING		<b>Architect</b> ARRAY HEALTHCARE FACILITIES SOLUTIONS	<b>Structural Engineer</b> WZG, STRUCTURAL CONSULTING ENGINEERS	<b>MEP/FP Engineer</b> APOGEE CONSULTING GROUP	<b>Civil Engineer</b> GUIDON DESIGN	<b>Fire Protection Consultant</b> HARRINGTON GROUP	<b>Cost Estimator</b> BRAY MOONEY CONSULTING	<b>Aquatic Consultant</b> ATLANTIC AQUATIC ENGINEERING	<b>Associate Architects</b> W. COOK ARCHITECTS					Location 1400 Black Horse Hill, Coatesville, PA	Building Number 69		
410 E. 21 STREET CHESTER, PA, 19013 Tel: (610) 872-3716		2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA, 19406 Tel: (610) 270-0599	P.O. BOX 24 40 LITTLE ROAD ZIEGLERVILLE, PA 19482 Tel: (610) 287-5194	7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC, 27606 Tel: (919) 859-7420	2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 800-6388	7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC, 28227 Tel: (704) 531-0077	410 E. 21 STREET CHESTER, PA, 19013 Tel: (610) 872-3716	1823 DEEP RUN ROAD PIPERSVILLE, PA, 18947 Tel: (215) 786-0409	1251 ROMANSVILLE ROAD COATESVILLE, PA, 19320 Tel: (610) 383-4460					Date 03/29/13	Checked DJR	Drawn ORD	
Revisions		Date														Dwg. 49 of 86	



A

three inches = one foot

B

one and one half inches = one foot

C

one inch = one foot

three quarters inch = one foot

D

one half inch = one foot

E

three eighths inch = one foot

one quarter inch = one foot

F

one eighth inch = one foot

A

B

C

D

E

F

EXISTING MECHANICAL ROOM

TO EXISTING  
STEAM  
SUPPLY

TO EXISTING  
CONDENSATE  
RETURN

HX-3

ST-1

AS-1

ET-1

HWP-3

HWP-4  
(REDUNDANT)

PROPOSED POOL EQUIPMENT ROOM

P-3

UH-1

69-DHU-1

HX-4

P-4

Pool Heating

Radiant Floor

HX-5

P-5

2 1/2" HWS/R IN  
PIPE TRENCH

1 POOL HOT WATER SCHEMATIC  
3/32" = 1'-0"

EXISTING MECHANICAL ROOM

EX 4" CWR,  
CAPPED  
FOR  
FUTURE  
EXPANSION

CONNECT TO  
EXISTING

EX 4" CWR,  
CAPPED  
FOR  
FUTURE  
EXPANSION

2 1/2" CWS/R

ET-2

CWP-3

CWP-4  
(REDUNDANT)

PROPOSED POOL EQUIPMENT ROOM

69-DAHU-1

2 1/2" CWS/R  
IN PIPE TRENCH

2 POOL COLD WATER SCHEMATIC  
3/32" = 1'-0"

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#### PROJECT MANAGER:

**Bray  
Mooney  
Consulting**

Project Number

3627

Scale

3/32" = 1'-0"

Drawing Title

MECHANICAL DETAILS

Project Title

RENOVATE BUILDING 69

VA Project Number

542-CSI-203

Building Number

69

Drawing Number

MH503

Dwg. 50 of 86

**Office of  
Facilities  
Management**



Department of  
Veterans Affairs



SEQUENCE OF CONTROL:

POOL AIR HANDLING UNIT – MECHANICAL DEHUMIDIFICATION WITH COMBINATION HOT WATER HEATING AND CHILLED WATER COOLING COIL.

THE AHU DDC SYSTEM SHALL HAVE A MINIMUM 7-DAY PROGRAMMABLE SCHEDULE AS DETERMINED BY THE USING AGENCY. THE SYSTEM SHALL OPERATE 24/7. THE SYSTEM SHALL BE CONTROLLED BY A LOCAL DDC PANEL AND REMOTELY MONITORED AND CONTROLLED FROM THE EXISTING CENTRAL BAS. WHEN THE AHU IS SHUT DOWN, THE O&RELIEF AIR DAMPERS SHALL CLOSE; COOLING AND HEATING VALVES SHALL CLOSE. IF THE UNIT IS SHUTDOWN BY AN ALARM CONDITION, THE SEQUENCE SHALL BE AS INDICATED UNDER THE ALARM CONDITION DESCRIBED BELOW.

THE UNIT SHALL CONTROL SPACE TEMPERATURE AND RELATIVE HUMIDITY. POOL WATER TEMPERATURE AND SHALL PROVIDE VENTILATION. WARM MOIST AIR FROM THE NATATORIUM IS DRAWN OVER THE EVAPORATOR COIL BY THE RETURN FAN AND LATENT AND SENSIBLE HEAT IS REMOVED FROM THE AIR. THE HEAT CAPTURE BY THIS PROCESS AND THE HEAT GENERATED FROM THE COMPRESSOR POWER CONSUMPTION ARE ABSORBED BY A MECHANICAL REFRIGERATION SYSTEM.

THE REFRIGERATION SYSTEM MAY BE ACTIVATED IF ANY OF THE FOLLOWING OCCUR:

1. SPACE TEMPERATURE DROPS BELOW THE SET POINT
2. SPACE RELATIVE HUMIDITY RISES ABOVE SET POINT.
3. SPACE TEMPERATURE RISES ABOVE THE SET POINT.

THE UNIT SHALL MONITOR SPACE AND OUTSIDE AIR TEMPERATURE, SPACE RELATIVE HUMIDITY, POOL WATER TEMPERATURE AND BUILDING SURFACE TEMPERATURE.

THE THERMAL ENERGY ABSORBED BY THE REFRIGERATION SYSTEM IS DISTRIBUTED AS FOLLOWS:

1. FIRST PRIORITY IS GIVEN TO MAINTAIN THE NATATORIUM SPACE TEMPERATURE. NO SUPPLEMENTARY SPACE HEATING SYSTEM EXTERNAL TO THE UNIT IS REQUIRED.
2. WHEN THE POOL WATER SET POINT IS BELOW 80 DEGREES FAHRENHEIT, SECOND PRIORITY IS GIVEN TO MAINTAIN THE POOL WATER TEMPERATURE.

THE CONTROL SYSTEM SHALL PROVIDE MODULATION OF HEAT RECOVERY/HEATING SYSTEM BY PROPORTIONAL CONTROL OF DRY BULB TEMPERATURE, RELATIVE HUMIDITY, COLD-WALL SURFACE CONDENSATION PREVENTION HUMIDITY RESET AND VENTILATION AIR VOLUME.

CONTROL SHALL AUTOMATICALLY OPERATE HEATING, DEHUMIDIFICATION AND HEAT RECOVERY SYSTEM IN RESPONSE TO GREATEST REQUIREMENT AND ADJUST UNIT OUTPUTS TO MAINTAIN BUILDING CONDITIONS. UNIT AND CONTROLS SHALL BE CAPABLE OF PROVIDING PARTIAL HEATING CAPACITY TO EITHER AIR OR WATER. CONTROLS SHALL BE CAPABLE OF PROPORTIONAL CONTROL OF HEATING AND DEHUMIDIFICATION BY LOADING STAGES OF COMPRESSOR CAPACITY AS NECESSARY. AS BUILDING REQUIREMENTS ARE SATISFIED, UNIT SHALL UNLOAD, AND SHUT OFF COMPRESSORS.

UNIT SHALL PROVIDE THE FOLLOWING FUNCTIONS:

VENTILATION MODE:

PROVIDE OUTDOOR VENTILATION AIR TO SATISFY MINIMUM VENTILATION AIR REQUIREMENTS PER VA STANDARDS.

OCCUPIED/UNOCCUPIED CONTROL MODE:

MICROPROCESSOR-BASED, 7 DAY, 24 HOUR OPERATION CONTROLS MAINTAIN THE OCCUPIED/UNOCCUPIED MODE OPERATION DURING HEATING SEASON. DURING UNOCCUPIED TIMES THE OUTSIDE AIR DAMPERS SHALL BE CLOSED TO MINIMIZE THE AIR-HEATING LOAD.

SPACE HEATING:

FULL PROPORTIONAL CONTROL OF SPACE DRY BULB TEMPERATURE SHALL BE MAINTAINED BY STAGING COMPRESSOR CAPACITY. WITH HUMIDITY OVERRIDE, AUTOMATIC MECHANICAL HEAT RECOVERY FROM POOL ROOM RETURN AIR AS REQUIRED BY BUILDING AND WATER TEMPERATURES. AUTOMATIC SWITCHING AND PROPORTIONING OUTPUTS FOR CONTROL OF AUXILIARY AIR HEATING SHALL BE PERFORMED.

POOL WATER HEATING:

IF THE SPACE TEMPERATURE IS AT OR ABOVE SET POINT AND THE POOL WATER TEMPERATURE IS BELOW THE SET POINT, HOT GAS IS DIRECTED TO THE POOL WATER CONDENSER WHEN THE COMPRESSOR IS RUNNING. AT TIMES WHEN THE POOL WATER REQUIRES HEAT, THE UNIT ACTIVATES THE MAIN POOL WATER HEATER. SEE SCHEDULE FOR AMOUNT OF HEAT REJECTION PROVIDED BY THE POOL WATER CONDENSER.

HUMIDITY CONTROL:

FULL PROPORTIONAL CONTROL OF HUMIDITY IS DONE BY STAGING UNIT CAPACITY. THE HUMIDITY CONTROLLER ENERGIZES THE COMPRESSOR AND DIRECTS HOT GAS TO THE AIR REHEAT CONDENSER IF THE SPACE REQUIRES HEATING OR THE POOL WATER CONDENSER IF POOL WATER TEMPERATURE IS BELOW SET POINT.

COOLING WITH INTEGRAL CHILLED WATER COIL:

ON A CALL FOR SPACE COOLING, THE REFRIGERATION SYSTEM IS DE-ENERGIZED, THE CHILLED WATER IS DIRECTED TO THE UNIT-MOUNTED CHILLED-WATER COIL VIA THE UNIT-MOUNTED, 2-WAY, CHILLED-WATER CONTROL VALVE.

CONDENSATION PREVENTION-COLD-WALL TEMPERATURE SENSOR HUMIDITY RESET CONTROL:

WHEN THE TEMPERATURE OF THE INTERIOR SURFACE AT THE WALL SENSOR DROPS TO WITHIN 5 DEGREES OF THE DEWPOINT TEMPERATURE OF THE SPACE AIR, THE RELATIVE HUMIDITY SET POINT IS OFFSET DOWNWARD. THIS CONDITION CAUSES THE DEHUMIDIFIER SYSTEM TO ACTIVATE HUMIDITY CONTROL TO LOWER THE SPACE DEW POINT AND HINDER THE FORMATION OF CONDENSATION ON THE COLD WALL OR GLASS SURFACE.

SAFETIES:

THE ALARMS AND SAFETIES SHALL BE MONITORED AND NOTIFY THE BAS OF ANY ALARM CONDITIONS. A LOW TEMPERATURE DETECTION THERMOSTAT SHALL BE PROVIDED TO DISABLE THE AIR HANDLING UNIT, CLOSE THE CHILLED WATER VALVE, OPEN THE HOT WATER VALVE, CLOSE THE OUTDOOR AND RELIEF AIR DAMPERS AND OPEN THE RETURN AIR DAMPER FULLY. AN ALARM SHALL NOTIFY THE AHU DDC PANEL AND CENTRAL DDC SYSTEM.

A SMOKE DETECTOR SHALL BE PROVIDED IN THE SUPPLY AND RETURN AIR DUCT AND SHALL DE-ENERGIZE THE UNIT AND ALARM THE AHU DDC PANEL AND THE CENTRAL DDC SYSTEM IN THE EVENT OF A SMOKE CONDITION.

HIGH OR LOW STATIC PRESSURE SENSOR SHALL DE-ENERGIZE THE UNIT AND ALARM THE AHU DDC PANEL AND THE CENTRAL DDC SYSTEM IN THE EVENT OF A HIGH OR LOW STATIC PRESSURE CONDITION.

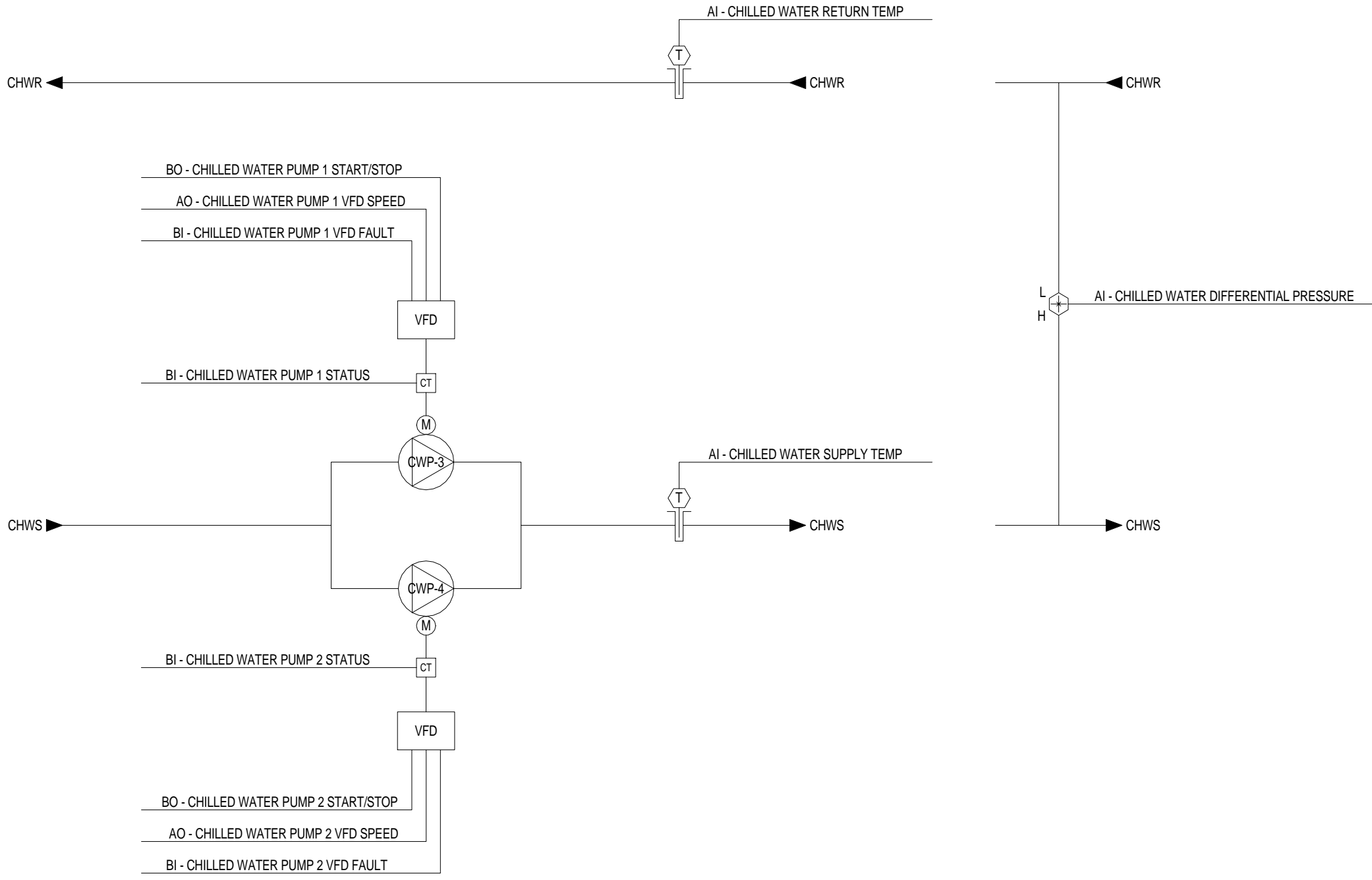
FILTER STATUS SHALL BE MONITORED THROUGH A DIFFERENTIAL PRESSURE SWITCH. UPON DETECTING DIRTY FILTERS, THE AHU DDC PANEL AND THE CENTRAL DDC SYSTEM SHALL BE ALARMED.

SMOKE CONTROLS:

A SIGNAL FROM THE AHU SMOKE DETECTOR OR FIRE ALARM SYSTEM SHALL SHUT DOWN THE AHU AND ALL RESPECTIVE SMOKE DAMPERS. THE AHU SHALL OPERATE AS SMOKE PURGE SYSTEM. A MANUAL OVERRIDE FUNCTION PROVIDED THROUGH THE DDC SYSTEM SHALL OVERRIDE THE SMOKE DETECTION DISABLE FUNCTION AND ALLOW THE RETURN AIR FAN TO ENERGIZE FULLY. THE RETURN AND OUTDOOR AIR DAMPERS SHALL FULLY CLOSE AND THE RELIEF AIR DAMPER SHALL FULLY OPEN. THE RETURN AIR SMOKE DAMPER(S) SHALL FULLY OPEN.

GRAPHICS AND MONITORING:

BAS FRONT END SYSTEM SHALL INCLUDE GRAPHICS SHOWING ALL HVAC SYSTEMS, ALARMS AND OTHER POINTS SHOWN ON THE DRAWINGS AND INCLUDED IN THE SPECIFICATIONS AND IN ACCORDANCE WITH VA REQUIREMENTS. VFDs SHALL REPORT OPERATIONAL AND ALARM CONDITIONS TO THE BAS.

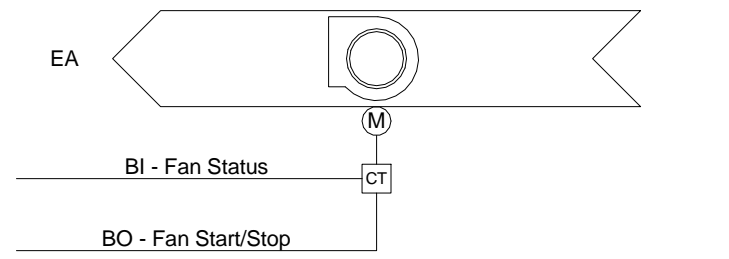


3 CHILLED WATER LOOP SCHEMATIC AND SEQUENCE OF OPERATION  
12" = 1'-0"

4 STEAM CONVERTER CONTROL DIAGRAM AND SEQUENCE OF OPERATION  
N.T.S.

1. GENERAL OPERATION  
1.1. THE CHILLED WATER PUMPS SHALL BE ENABLED WHENEVER THE POOL ENCLOSURE AIR HANDLING UNIT REQUIRES COOLING. TO PREVENT SHORT CYCLING, THE CHILLED WATER PUMP SYSTEM SHALL RUN FOR AND BE OFF FOR MINIMUM ADJUSTABLE TIMES (BOTH USER DEFINABLE). THE FOLLOWING SETPOINTS ARE RECOMMENDED VALUES. ALL SETPOINTS SHALL BE FIELD ADJUSTED DURING THE COMMISSIONING PERIOD TO MEET THE REQUIREMENTS OF ACTUAL FIELD CONDITIONS.
2. FLOW CONTROL  
2.1. THE TWO VARIABLE SPEED CHILLED WATER PUMPS SHALL OPERATE IN A LEAD/LAG FASHION. THE LEAD PUMP SHALL RUN FIRST. ON FAILURE OF THE LEAD PUMP, THE LAG PUMP SHALL RUN AND THE LEAD PUMP SHALL TURN OFF. ON DECREASING CHILLED WATER DIFFERENTIAL PRESSURE, THE LAG PUMP SHALL STAGE ON AND RUN IN UNISON WITH THE LEAD PUMP TO MAINTAIN CHILLED WATER DIFFERENTIAL PRESSURE SETPOINT.  
2.2. THE DESIGNATED LEAD PUMP SHALL ROTATE UPON ONE OF THE FOLLOWING CONDITIONS (USER SELECTABLE):  
2.2.1. MANUALLY THROUGH A SOFTWARE SWITCH  
2.2.2. IF PUMP RUNTIME (ADJ.) IS EXCEEDED  
2.2.3. DAILY  
2.2.4. WEEKLY  
2.2.5. MONTHLY  
2.3. THE CONTROLLER SHALL MEASURE CHILLED WATER DIFFERENTIAL PRESSURE AND MODULATE THE CHILLED WATER PUMP VFDs IN SEQUENCE TO MAINTAIN ITS CHILLED WATER DIFFERENTIAL PRESSURE SETPOINT. THE CONTROLLER SHALL MODULATE CHILLED WATER PUMP SPEEDS TO MAINTAIN A CHILLED WATER DIFFERENTIAL PRESSURE OF 12.0B/FIN2 (ADJ.). THE VFDs MINIMUM SPEED SHALL NOT DROP BELOW 20% (ADJ.).  
2.4. ON DROPPING CHILLED WATER DIFFERENTIAL PRESSURE, THE VFDs SHALL STAGE ON AND RUN TO MAINTAIN SETPOINT AS FOLLOWS:  
2.4.1. THE CONTROLLER SHALL MODULATE THE LEAD VFD TO MAINTAIN SETPOINT.  
2.4.2. IF THE LEAD VFD SPEED IS GREATER THAN A SETPOINT OF 80% (ADJ.), THE LAG VFD SHALL STAGE ON.  
2.4.3. THE LAG VFD SHALL RAMP UP TO MATCH THE LEAD VFD SPEED AND THEN RUN IN UNISON WITH THE LEAD VFD TO MAINTAIN SETPOINT.  
2.5. ON RISING CHILLED WATER DIFFERENTIAL PRESSURE, THE VFDs SHALL STAGE OFF AS FOLLOWS:  
2.5.1. IF THE VFDs SPEEDS THEN DROPS BACK TO 80% (ADJ.) BELOW SETPOINT, THE LAG VFD SHALL STAGE OFF.  
2.5.2. THE LEAD VFD SHALL CONTINUE TO RUN TO MAINTAIN SETPOINT.  
2.5.3.
3. CHILLED WATER TEMPERATURE MONITORING  
3.1. THE FOLLOWING TEMPERATURES SHALL BE MONITORED: CHILLED WATER SUPPLY, CHILLED WATER RETURN. THERE IS NO CHILLED WATER TEMPERATURE CONTROL LOCAL TO THIS BUILDING. THE CHILLED WATER TEMPERATURE IS CONTROLLED BY THE CENTRAL CHILLER PLANT.
4. ALARMS  
4.1. CHILLED WATER PUMP 1  
4.1.1. FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.  
4.1.2. RUNNING IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.  
4.1.3. RUNTIME EXCEEDED: STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT.  
4.1.4. VFD FAULT.  
4.2. CHILLED WATER PUMP 2  
4.2.1. FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.  
4.2.2. RUNNING IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.  
4.2.3. RUNTIME EXCEEDED: STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT.  
4.2.4. VFD FAULT.  
4.3. HIGH CHILLED WATER DIFFERENTIAL PRESSURE: IF THE CHILLED WATER DIFFERENTIAL PRESSURE IS 25% (ADJ.) GREATER THAN SETPOINT  
4.4. LOW CHILLED WATER DIFFERENTIAL PRESSURE: IF THE CHILLED WATER DIFFERENTIAL PRESSURE IS 25% (ADJ.) LESS THAN SETPOINT.  
4.5. HIGH CHILLED WATER SUPPLY TEMP: IF THE CHILLED WATER SUPPLY TEMPERATURE IS GREATER THAN 95°F (ADJ.).  
4.6. LOW CHILLED WATER SUPPLY TEMP: IF THE CHILLED WATER SUPPLY TEMPERATURE IS LESS THAN 80°F (ADJ.).

1. GENERAL  
1.1. THE HEAT EXCHANGER SYSTEM SHALL BE ENABLED TO RUN THE POOL AIR HANDLER OR SUPPLEMENTARY WATER HEATER CALL FOR HEAT. TO PREVENT SHORT CYCLING, THE HEAT EXCHANGER SHALL RUN FOR AND BE OFF FOR MINIMUM ADJUSTABLE TIMES (BOTH USER DEFINABLE). THE FOLLOWING SETPOINTS ARE RECOMMENDED VALUES. ALL SETPOINTS SHALL BE FIELD ADJUSTED DURING THE COMMISSIONING PERIOD TO MEET THE REQUIREMENTS OF ACTUAL FIELD CONDITIONS.
2. FLOW CONTROL  
2.1. THE TWO HOT WATER PUMPS SHALL OPERATE IN A LEAD/LAG FASHION. THE LEAD PUMP SHALL RUN FIRST. ON FAILURE OF THE LEAD PUMP, THE LAG PUMP SHALL RUN AND THE LEAD PUMP SHALL TURN OFF. ON DECREASING HOT WATER DIFFERENTIAL PRESSURE, THE LAG PUMP SHALL STAGE ON AND RUN IN UNISON WITH THE LEAD PUMP TO MAINTAIN HOT WATER DIFFERENTIAL PRESSURE SETPOINT.  
2.2. THE DESIGNATED LEAD PUMP SHALL ROTATE UPON ONE OF THE FOLLOWING CONDITIONS (USER SELECTABLE): MANUALLY THROUGH A SOFTWARE SWITCH IF PUMP RUNTIME (ADJ.) IS EXCEEDED DAILY WEEKLY MONTHLY. THE CONTROLLER SHALL MEASURE HOT WATER DIFFERENTIAL PRESSURE AND MODULATE THE HOT WATER PUMP VFDs IN SEQUENCE TO MAINTAIN ITS HOT WATER DIFFERENTIAL PRESSURE SETPOINT. CONTROLLER SHALL MODULATE HOT WATER PUMP SPEEDS TO MAINTAIN A HOT WATER DIFFERENTIAL PRESSURE OF 12.0B/FIN2 (ADJ.). THE VFDs MINIMUM SPEED SHALL NOT DROP BELOW 20% (ADJ.).  
2.3. ON DROPPING HOT WATER DIFFERENTIAL PRESSURE, THE VFDs SHALL STAGE ON AND RUN TO MAINTAIN SETPOINT AS FOLLOWS: THE CONTROLLER SHALL MODULATE THE LEAD VFD TO MAINTAIN SETPOINT. IF THE LEAD VFD SPEED IS GREATER THAN A SETPOINT OF 80% (ADJ.), THE LAG VFD SHALL STAGE ON. THE LAG VFD SHALL RAMP UP TO MATCH THE LEAD VFD SPEED AND THEN RUN IN UNISON WITH THE LEAD VFD TO MAINTAIN SETPOINT.  
2.4. ON RISING HOT WATER DIFFERENTIAL PRESSURE, THE VFDs SHALL STAGE OFF AS FOLLOWS: IF THE VFDs SPEEDS DROPS BACK TO 80% (ADJ.) BELOW SETPOINT, THE LAG VFD SHALL STAGE OFF. THE LEAD VFD SHALL CONTINUE TO RUN TO MAINTAIN SETPOINT.
3. TEMPERATURE CONTROL  
3.1. THE HOT WATER SUPPLY TEMPERATURE SETPOINT SHALL RESET BASED ON OUTSIDE AIR TEMPERATURE. AS OUTSIDE AIR TEMPERATURE RISES FROM 0°F (ADJ.) TO 70°F (ADJ.) THE HOT WATER SUPPLY TEMPERATURE SETPOINT SHALL RESET DOWNWARDS FROM 180°F (ADJ.) TO 150°F (ADJ.). THE CONTROLLER SHALL MEASURE THE HOT WATER SUPPLY TEMPERATURE AND MODULATE THE STEAM VALVE TO MAINTAIN ITS SETPOINT.  
3.2. THE STEAM VALVE SHALL CLOSE WHENEVER THE HOT WATER SUPPLY TEMPERATURE RISES FROM 180°F TO 200°F (ADJ.).
4. ALARMS  
4.1. HOT WATER PUMP 1  
4.1.1. FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.  
4.1.2. RUNNING IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.  
4.1.3. RUNTIME EXCEEDED: STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT.  
4.1.4. VFD FAULT.  
4.2. HOT WATER PUMP 2  
4.2.1. FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.  
4.2.2. RUNNING IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.  
4.2.3. RUNTIME EXCEEDED: STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT.  
4.2.4. VFD FAULT.  
4.3. HIGH HOT WATER DIFFERENTIAL PRESSURE: IF 25% (ADJ.) GREATER THAN SETPOINT.  
4.4. LOW HOT WATER DIFFERENTIAL PRESSURE: IF 25% (ADJ.) LESS THAN SETPOINT.  
4.5. HIGH HOT WATER SUPPLY TEMP: IF GREATER THAN 200°F (ADJ.).  
4.6. LOW HOT WATER SUPPLY TEMP: IF LESS THAN 140°F (ADJ.).



SEQUENCE OF OPERATION:

RUN CONDITIONS: INTERLOCKED. THE FAN EF-1 SHALL BE INTERLOCKED TO RUN WHENEVER THE BUILDING IS IN OCCUPIED MODE.

FAN:

THE FAN SHALL HAVE A USER DEFINABLE (ADJ.) MINIMUM RUNTIME.

FAN STATUS:

THE CONTROLLER SHALL MONITOR THE FAN STATUS.

ALARMS SHALL BE PROVIDED AS FOLLOWS:

- FAN FAILURE: COMMANDED ON, BUT THE STATUS IS OFF
- FAN IN HAND: COMMANDED OFF, BUT THE STATUS IS ON
- FAN RUNTIME EXCEEDED: FAN STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT (ADJ.)

	HARDWARE POINTS				SOFTWARE POINTS				SHOW ON GRAPHIC
POINT NAME	AI	AO	BI	BO	AV	BV	LOOP/SCHED	TREND/ALARM	
FAN STATUS			X					X	X
FAN START/STOP			X					X	X
FAN FAILURE								X	
FAN IN HAND								X	
FAN RUNTIME EXCEEDED								X	
TOTALS	0	0	1	1	0	0	0	2	3
TOTAL HARDWARE (2)				TOTAL SOFTWARE (5)					

2 EXHAUST FAN CONTROLS  
N.T.S.

1 69-DAHU-1 SEQUENCE OF OPERATION  
12" = 1'-0"

CONSULTANTS:										PROJECT MANAGER:		Project Number 3627	Scale N.T.S.	Drawing Title TEMPERATURE CONTROL SCHEMATIC		Project Title RENOVATE BUILDING 69		VA Project Number 542-CSI-203		Office of Facilities Management					
Project Manager BRAY MOONEY CONSULTING		Architect ARRAY HEALTHCARE FACILITIES SOLUTIONS		Structural Engineer WZG, STRUCTURAL CONSULTING ENGINEERS		MEP/FP Engineer APOGEE CONSULTING GROUP		Civil Engineer GUIDON DESIGN		Fire Protection Consultant HARRINGTON GROUP		Cost Estimator BRAY MOONEY CONSULTING		Aquatic Consultant ATLANTIC AQUATIC ENGINEERING		Associate Architects W. COOK ARCHITECTS		Building Number 69							
410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716		2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA 19036 Tel: (610) 270-0599		P.O. BOX 24 40 LITTLE ROAD ZIEGLERSVILLE, PA 19482 Tel: (610) 287-5194		7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC 27606 Tel: (919) 859-7420		2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 800-6388		7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC 28227 Tel: (704) 531-6077		410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716		1823 DEEP RUN ROAD PIPERSVILLE, PA 18947 Tel: (215) 786-0409		1251 ROMANSVILLE ROAD COATESVILLE, PA 19320 Tel: (610) 383-4460		Location 1400 Black Horse Hill, Coatesville, PA				Drawing Number MH504			
Revisions		Date												Approved: Project Director		Date 03/29/13		Checked DJR		Drawn ORD		Dwg. 51 of 86		 Department of Veterans Affairs	

FULLY SPRINKLERED  
ISSUED FOR BID



**AIR DEVICE SCHEDULE (SUPPLY)**



ROOM AIR BALANCE SCHEDULE													
ROOM NO.	ROOM NAME	AIR HANDLING UNIT	INDIVIDUAL TEMP CONTROL	SUPPLY		RETURN		EXHAUST		ROOM AIR FLOW		NET INFILTRATION	NET EXFILTRATION
				AIRFLOW	AIR DEVICE MARK	AIRFLOW	AIR DEVICE MARK	AIRFLOW	AIR DEVICE MARK	CV	VAV		
1-100	CORRIDOR		Yes	120 CFM	SD-20	0 CFM		0 CFM		YES	---	(+)	0 CFM
1-101	CONFERENCE ROOM		Yes	140 CFM	SD-21	0 CFM		160 CFM	EG-14	YES	---	(-)	20 CFM
1-102	OFFICE		Yes	55 CFM	SD-19	0 CFM		55 CFM	EG-10	YES	---	(0)	0 CFM
1-103	ADMIN. OFFICE		Yes	45 CFM	SD-18	0 CFM		45 CFM	EG-11	YES	---	(0)	0 CFM
1-104	OFFICE		Yes	55 CFM	SD-17	0 CFM		55 CFM	EG-12	YES	---	(0)	0 CFM
1-105	REGISTRATION		Yes	120 CFM	SD-15	0 CFM		0 CFM		YES	---	(-)	0 CFM
1-106	MAIN WAITING		No	360 CFM	SD-14, SD-16	665 CFM	RG-6, RG-8	0 CFM		YES	---	(-)	305 CFM
1-106A	MENS TOILET		No	0 CFM		310 CFM	RG-9	310 CFM	EG-13	YES	---	(-)	310 CFM
1-106B	WOMENS TOILET		No	0 CFM		355 CFM	RG-7	355 CFM	EG-7	YES	---	(-)	355 CFM
1-107	VESTIBULE		Yes	40 CFM	SD-13	0 CFM		0 CFM		YES	---	(+)	0 CFM
1-109	OFFICE		Yes	30 CFM	SD-7	0 CFM		30 CFM	EG-8	YES	---	(0)	0 CFM
1-110	CORRIDOR		Yes	227 CFM	SD-12	195 CFM	RG-3	0 CFM		YES	---	(+)	0 CFM
1-111	OFFICE		Yes	30 CFM	SD-6	0 CFM		30 CFM	EG-5	YES	---	(0)	0 CFM
1-112	OFFICE		Yes	30 CFM	SD-5	0 CFM		30 CFM	EG-4	YES	---	(0)	0 CFM
1-113	EXAM		No	105 CFM	SD-10	105 CFM	RG-4	0 CFM		YES	---	(0)	0 CFM
1-114	SOILED		No	0 CFM		65 CFM		65 CFM	EG-6	YES	---	(-)	65 CFM
1-115	EXAM		Yes	105 CFM	SD-11	105 CFM	RG-5	0 CFM		YES	---	(0)	0 CFM
1-116	EXAM		No	100 CFM	SD-9	100 CFM	RG-2	0 CFM		YES	---	(0)	0 CFM
1-117	EXAM		No	100 CFM	SD-8	100 CFM	RG-1	0 CFM		YES	---	(0)	0 CFM
1-118	OFFICE		Yes	30 CFM	SD-4	0 CFM		30 CFM	EG-3	YES	---	(0)	0 CFM
1-119	ACTIVITY ROOM		Yes	240 CFM	SD-2, SD-3	0 CFM		240 CFM	EG-2	YES	---	(0)	0 CFM
1-121	EX ELEC. RM		No	0 CFM		0 CFM		100 CFM	EG-30	YES	---	(-)	100 CFM
1-122	STAFF BREAK		Yes	490 CFM	SD-47, SD-66	500 CFM	RG-43	0 CFM		YES	---	(-)	0 CFM
1-122A	STAFF TLT.		No	0 CFM		0 CFM		80 CFM	EG-39	YES	---	(-)	80 CFM
1-123	HSPK.		No	0 CFM		0 CFM		80 CFM	EG-22	YES	---	(-)	80 CFM
1-124	RECEIVING/ STORAGE		No	160 CFM	SD-64	140 CFM	RG-23	0 CFM		YES	---	(+)	0 CFM
1-125	STORAGE (KT CLINIC)		No	50 CFM	SD-44	0 CFM		0 CFM		YES	---	(+)	0 CFM
1-126	CLST.		No	50 CFM	SD-42	0 CFM		0 CFM		YES	---	(+)	0 CFM
1-127	PROSTHETICS/ ORTHOTICS		Yes	280 CFM	SD-32	280 CFM	RG-14	0 CFM		YES	---	(0)	0 CFM
1-128	PROSTHETICS/ ORTHOTICS		No	120 CFM	SD-34	120 CFM	RG-13	0 CFM		YES	---	(0)	0 CFM
1-129	WORK EVALUATION		Yes	45 CFM	SD-1	0 CFM		45 CFM	EG-1	YES	---	(0)	0 CFM
1-130	CORRIDOR		No	65 CFM	SD-41	0 CFM		65 CFM		YES	---	(+)	0 CFM
1-131	STORAGE (PT CLINIC)		Yes	180 CFM	SD-30	150 CFM	RG-32	0 CFM		YES	---	(+)	0 CFM
1-132	CORRIDOR		Yes	340 CFM	SD-29, SD-49	0 CFM		200 CFM	EG-16	YES	---	(+)	0 CFM
1-133	CORRIDOR		Yes	175 CFM	SD-79	0 CFM		0 CFM		YES	---	(+)	0 CFM
1-134	VESTIBULE		Yes	30 CFM	SD-63	0 CFM		0 CFM		YES	---	(+)	0 CFM
1-135	CORRIDOR		Yes	150 CFM	SD-67	0 CFM		0 CFM		YES	---	(+)	0 CFM
1-136	STAIR		Yes	0 CFM	0 CFM	0 CFM		0 CFM		YES	---	(0)	0 CFM
1-201	SUB WAITING		No	0 CFM	0 CFM	0 CFM		0 CFM		YES	---	(-)	0 CFM
1-202	PHYSICAL THERAPY CLINIC		Yes	200 CFM	SD-23	0 CFM		620 CFM	EG-9, EG-15	YES	---	(-)	420 CFM
1-203	PRIVATE TREATMENT ROOM		No	95 CFM	SD-24	105 CFM	RG-12	0 CFM		YES	---	(-)	0 CFM
1-204	OFFICE		Yes	375 CFM	SD-22	375 CFM	RG-11	0 CFM		YES	---	(0)	0 CFM
1-205	SHARED ACTIVITY/ EQUIPMENT		Yes	195 CFM	SD-38	0 CFM		250 CFM	EG-17	YES	---	(0)	55 CFM
1-301	KINESIOTHERAPY THERAPY CLINIC		Yes	415 CFM	SD-39, SD-40	0 CFM		0 CFM		YES	---	(0)	415 CFM
1-302	OFFICE		No	70 CFM	SD-35	70 CFM	RG-15	0 CFM		YES	---	(0)	0 CFM
1-303	CLST.		No	0 CFM	0 CFM	0 CFM		0 CFM		YES	---	(0)	0 CFM
1-304	PRIV. TREATMENT RM		No	70 CFM	SD-36	70 CFM	RG-16	0 CFM		YES	---	(0)	0 CFM
1-401	RECEPTION		No	70 CFM	SD-56	0 CFM		0 CFM		YES	---	(-)	0 CFM
1-402	WAITING		Yes	300 CFM	SD-55	340 CFM	RG-18	0 CFM		YES	---	(-)	40 CFM
1-403	PT. TLT.		No	0 CFM	0 CFM	0 CFM		80 CFM	EG-24	YES	---	(-)	80 CFM
1-404	PT. TLT.		No	0 CFM	0 CFM	0 CFM		80 CFM	EG-23	YES	---	(-)	80 CFM
1-405	SUPPORT OFFICE		Yes	85 CFM	SD-37	85 CFM	RG-17	0 CFM		YES	---	(0)	0 CFM
1-406	TREATMENT		Yes	225 CFM	SD-50	225 CFM	RG-33	0 CFM		YES	---	(0)	0 CFM
1-407	TREATMENT		Yes	690 CFM	SD-51, SD-52	690 CFM	RG-34, RG-35	0 CFM		YES	---	(0)	0 CFM
1-407A	SOUND BOOTH		No	0 CFM	0 CFM	0 CFM		0 CFM		YES	---	(0)	0 CFM
1-408	TREATMENT		Yes	690 CFM	SD-53, SD-54	690 CFM	RG-36, RG-37	0 CFM		YES	---	(0)	0 CFM
1-408A	SOUND BOOTH		No	0 CFM	0 CFM	0 CFM		0 CFM		YES	---	(0)	0 CFM
1-409	TREATMENT		Yes	690 CFM	SD-88, SD-89	690 CFM	RG-38, RG-39	0 CFM		YES	---	(0)	0 CFM
1-409A	SOUND BOOTH		No	0 CFM	0 CFM	0 CFM		0 CFM		YES	---	(0)	0 CFM
1-411	TREATMENT		Yes	690 CFM	SD-80, SD-90	690 CFM	RG-40, RG-41	0 CFM		YES	---	(0)	0 CFM
1-411A	SOUND BOOTH		No	0 CFM	0 CFM	0 CFM		0 CFM		YES	---	(0)	0 CFM
1-412	SHARED OFFICE		Yes	500 CFM	SD-61, SD-62	500 CFM	RG-22	0 CFM		YES	---	(0)	0 CFM
1-415	TECH WAITING		No	120 CFM	SD-57	135 CFM	RG-19	0 CFM		YES	---	(-)	15 CFM
1-416	TECHNICIAN'S WORKROOM		Yes	340 CFM	SD-58, SD-59	340 CFM	RG-20	0 CFM		YES	---	(0)	0 CFM
1-416A	RECEIVING/ HOLDING/ SHIPPING		No	150 CFM	SD-60	130 CFM	RG-21	0 CFM		YES	---	(+)	0 CFM
1-501	K.T.C. WEIGHT CONDITIONING		Yes	2070 CFM	SD-69, SD-70, SD-71, SD-82, SD-83, SD-84, SD-85, SD-86, SD-87	2280 CFM	RG-25, RG-26, RG-27	0 CFM		YES	---	(-)	210 CFM
1-502	TREATMENT		No	0 CFM	0 CFM	0 CFM		0 CFM		YES	---	(0)	0 CFM
1-503	OFFICE		Yes	160 CFM	SD-65	160 CFM	RG-24	0 CFM		YES	---	(0)	0 CFM
1-600	CORRIDOR		Yes	300 CFM	SD-74, SD-75	190 CFM	RG-29, RG-30	0 CFM		YES	---	(+)	0 CFM
1-601	WOMEN'S SHOWER/ LOCKER		Yes	200 CFM	SD-72	85 CFM	RG-28	285 CFM	EG-31, EG-33	YES	---	(-)	85 CFM
1-601	WOMEN'S SHOWER/ LOCKER		No	0 CFM	0 CFM	0 CFM		0 CFM		YES	---	(-)	0 CFM
1-602	LAUNDRY		No	100 CFM	SD-73	0 CFM		145 CFM	EG-32	YES	---	(-)	45 CFM
1-604	OFFICE		Yes	45 CFM	SD-76	0 CFM		0 CFM		YES	---	(0)	0 CFM
1-604A	IT		No	0 CFM	0 CFM	0 CFM		0 CFM		YES	---	(0)	0 CFM
1-604B	TLT.		No	0 CFM	0 CFM	0 CFM		75 CFM	EG-26	YES	---	(-)	75 CFM
1-605	MEN'S SHOWER/ LOCKER		Yes	600 CFM	SD-77, SD-78	185 CFM	RG-31	705 CFM	EG-27, EG-28	YES	---	(-)	105 CFM
1-701	M.H.O.T. CLINIC		Yes	335 CFM	SD-45, SD-46	0 CFM		430 CFM	EG-21	YES	---	(-)	95 CFM
1-701A	EX.ELECTRICAL ROOM		No	0 CFM	0 CFM	0 CFM		100 CFM	EG-20	YES	---	(-)	100 CFM
1-701B	STORAGE		No	50 CFM	SD-43	0 CFM		0 CFM		YES	---	(+)	0 CFM
1-702	KILN/ SLURRY ROOM		Yes	180 CFM	SD-48	180 CFM	RG-42	0 CFM		YES	---	(0)	0 CFM
1-703	OFFICE		No	45 CFM	SD-68	0 CFM		0 CFM		YES	---	(+)	0 CFM
1-703A	CLEAN HOLD		No	45 CFM	SD-91	0 CFM		0 CFM		YES	---	(+)	0 CFM
1-703B	SOILED		No	0 CFM	0 CFM	0 CFM		50 CFM	EG-34	YES	---	(-)	50 CFM
1-802	BEDROOM		Yes	65 CFM	SD-25	150 CFM	RG-10	0 CFM		YES	---	(-)	85 CFM
1-802A	BATHROOM		No	0 CFM	0 CFM	0 CFM		0 CFM		YES	---	(0)	0 CFM
1-802B	CLST		No	0 CFM	0 CFM	0 CFM		0 CFM		YES	---	(0)	0 CFM
1-803	ADL KITCHEN & LAUNDRY		No	300 CFM	SD-26, SD-27	0 CFM		420 CFM	EG-18	YES	---	(0)	120 CFM
1-803	ADL KITCHEN & LAUNDRY		Yes	150 CFM	SD-28	0 CFM		0 CFM		YES	---	(0)	0 CFM
1-804	STORAGE (TOT CLINIC)		No	100 CFM	SD-33	0 CFM		0 CFM		YES	---	(+)	0 CFM
1-805	OFFICE		Yes	55 CFM	SD-31	0 CFM		55 CFM	EG-19	YES	---	(0)	0 CFM
388	CORRODOR		Yes	120 CFM	SD-81	0 CFM		100 CFM	EG-29	YES	---	(+)	0 CFM

FAN SCHEDULE																
MARK	LOCATION	AREA AND/OR ROOM SERVED	SERVICE	AIRFLOW	TYPE	TSP	WHEEL	CLASS	ARRANGEMENT, ROTATION, AND DISCHARGE	MIN % EFF	DRIVE	FAN MAX RPM	BHP	HP (W)	PHASE	VOLT
69-EF-1	69-DAHU-1	POOL ENCLOSURE	AHU EXHAUST	1600 CFM	CENTRIFUGAL	0.50 in-wg	F1			---	BD	0	0.4	1	3	460
69-SF-1	69-DAHU-1	POOL ENCLOSURE	AHU SUPPLY	7000 CFM	CENTRIFUGAL	1.00 in-wg	Bi			---	BD	0	4.5	7.5	3	460
EF-1	ROOF	LOCKERS	GENERAL EXHAUST	1210 CFM	UPBLAST CENTRIFUGAL	0.38 in-wg	Bi			43.4	DD	1725	NA	1/2	1	115
EF-2	ROOF	BATHROOM	GENERAL EXHAUST	310 CFM	UPBLAST CENTRIFUGAL	0.13 in-wg	Bi			27.6	DD	1300	NA	1/30	1	115
EF-3	ROOF	BATHROOM	GENERAL EXHAUST	420 CFM	UPBLAST CENTRIFUGAL	0.13 in-wg	Bi			41.1	DD	1050	NA	1/40	1	115
EF-4	CEILING	BATHROOM	GENERAL EXHAUST	160 CFM	CABINET EXHAUST	0.13 in-wg	F1			---	DD	719	NA	(83)	1	115
EF-5	CEILING	BATHROOM	GENERAL EXHAUST	160 CFM	CABINET EXHAUST	0.13 in-wg	F1			---	DD	719	NA	(83)	1	115

AIR HANDLING UNIT SCHEDULE																
MARK	LOCATION	AREA AND/OR ROOM SERVED	TYPE	AIRFLOW	SUPPLY	RETURN	SUPPLY FAN MARK	RETURN OR RELIEF FAN MARK	EXHAUST FAN MARK	PREFILTER MARK	AFTERFILTER MARK	FINAL FILTER MARK	HEAT RECOVERY MARK	PREHEAT COIL MARK	COOLING COIL MARK	REHEAT COIL MARK
69-DAHU-1	POOL MECH. ROOM	POOL ENCLOSURE	DRAW THRU	CV	7000 CFM	1600 CFM	69-SF-1	NA	69-EF-1	NA	NA	NA	NA	NA	69-CHWC-1	69-HC-1

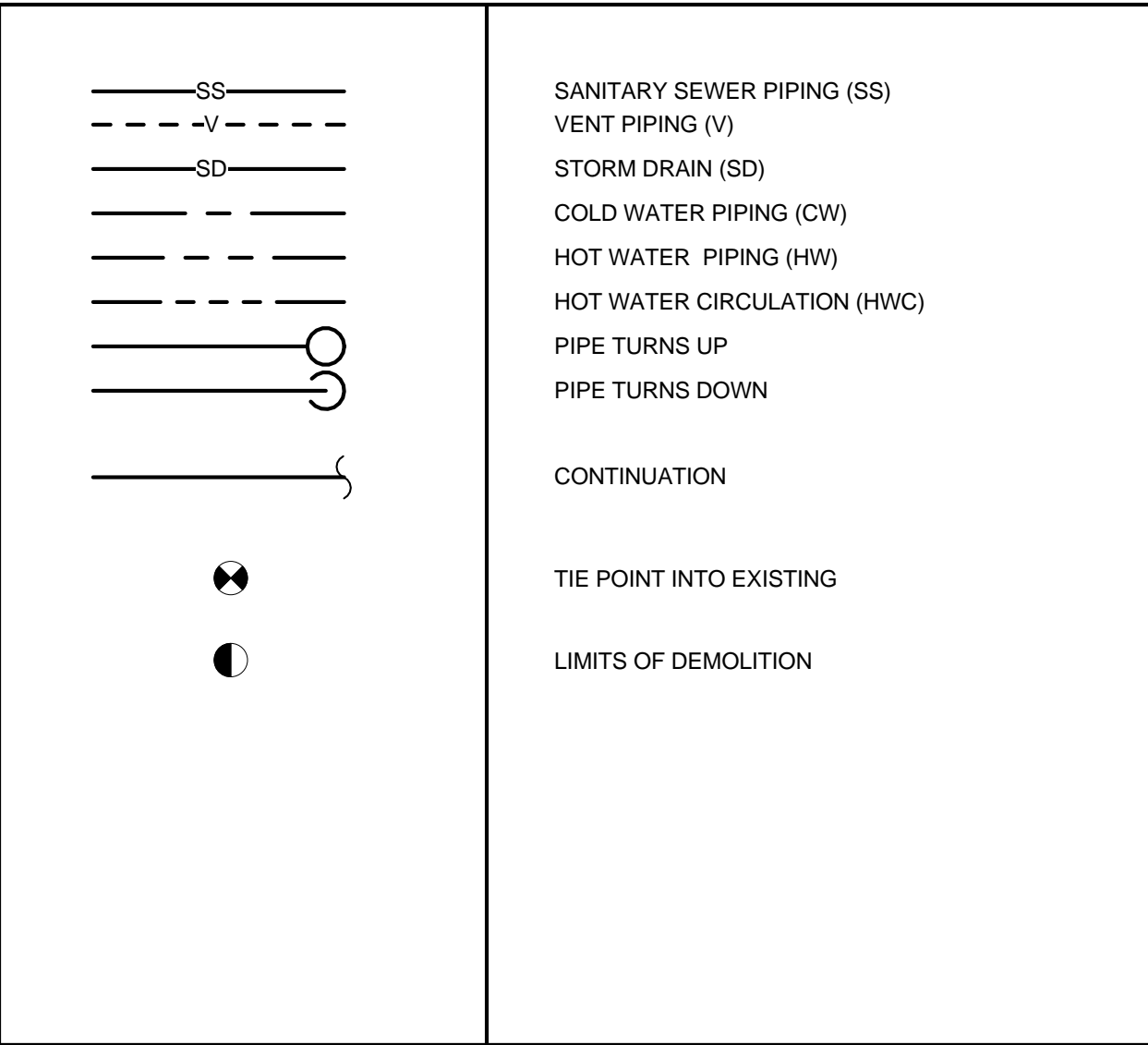
CHILLED WATER COOLING COIL SCHEDULE																	
MARK	LOCATION	AREA AND/OR ROOM SERVED	SYSTEM AIR HANDLING	AIRFLOW	MAX FACE VELOCITY	APD	EAT		LAT		TOTAL CAPACITY	SENSIBLE CAPACITY	CHILLED WATER			REMARKS	
							DB	WB	DB	WB			FLOW	EWT	LWT		WPD (FT HD)
69-CHWC-1	69-DAHU-1	POOL ENCLOSURE	69-DAHU-1	7000 CFM	403 FPM	0.37 in-wg	87.2 °F	74.9 °F	70.0 °F	62.9 °F	278000.0 Btu/h	181000.0 Btu/h	56 GPM	45 °F	55 °F	15	CHILLED WATER COIL IS COMBINED WITH HOT WATER COIL



GENERAL NOTES AND SPECIFICATIONS

- 1
- THE ENTIRE PLUMBING SYSTEM SHALL BE IN ACCORDANCE WITH ALL PROJECT SPECIFICATIONS, LOCAL, STATE, AND NATIONAL CODES ALONG WITH ALL VA STANDARDS. EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE TO MANUFACTURER'S WRITTEN RECOMMENDATIONS.
- 2
- ALL WORK SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO INSTALLATION. CONTRACTOR SHALL COORDINATE ROUTING OF ALL PIPING WITH EXISTING CONDITIONS AND SHALL PROVIDE ANY NECESSARY OFFSETS, REROUTING, ETC. REQUIRED FOR A COMPLETE AND COORDINATED INSTALLATION.
- 3
- THESE PLANS ARE DIAGRAMMATIC. CONTRACTOR SHALL PROVIDE ALL NECESSARY OFFSETS, TEES, ELBOWS, ETC. FOR A COMPLETE WORKING PLUMBING SYSTEM.
- 4
- THE PLUMBING CONTRACTOR SHALL COMPLY WITH ALL VA PERMIT AND INSPECTION PROCEDURES REQUIRED FOR THIS WORK.
- 5
- CONTRACTOR SHALL COORDINATE ANY PLUMBING SYSTEM REQUIRING SHUTDOWN WITH THE OWNER 1 WEEK IN ADVANCE.
- 6
- ALL DOMESTIC PIPING SHOWN IS LOCATED ABOVE THE CEILING OR WITHIN WALLS UNLESS NOTED OTHERWISE.
- 7
- ALL PLUMBING FIXTURES AND KITCHEN EQUIPMENT SHALL HAVE A PISTON TYPE WATER HAMMER ARRESTOR SIZED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- 8
- ALL SANITARY SEWER PIPING SHOWN IS LOCATED BELOW GRADE OR WITHIN WALLS UNLESS NOTED OTHERWISE. ALL SANITARY VENT PIPING SHOWN IS ABOVE CEILING OR WITHIN WALLS UNLESS NOTED OTHERWISE.
- 9
- ALL PIPING SYSTEMS SHALL BE SUPPORTED AS REQUIRED BY ALL LOCAL, STATE, AND NATIONAL CODES ALONG WITH ALL VA STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
- 10
- ALL PIPING PENETRATIONS THRU NEW OR EXISTING WALLS OR FLOORS SHALL BE SEALED TO EQUAL THE RATING OF THE NEW OR EXISTING WALL OR FLOOR.
- 11
- ALL PLUMBING SYSTEMS SHALL BE TESTED AS REQUIRED PER ALL LOCAL, STATE, AND NATIONAL CODES ALONG WITH ALL VA STANDARDS.
- 12
- THE PLUMBING CONTRACTOR SHALL COORDINATE ALL PLUMBING PIPING WITH ALL STRUCTURAL COMPONENTS.
- 13
- THE ENTIRE DOMESTIC WATER SYSTEM SHALL BE DISINFECTED IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL CODES ALONG WITH ALL VA STANDARDS.

PLUMBING LEGEND



PLUMBING ABBREVIATIONS

ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
BFP	BACKFLOW PREVENTER
CW	COLD WATER
CV	COMMON VENT
FCO	FLOOR CLEANOUT (FLOOR OR SLAB)
FD	FLOOR DRAIN
GCO	GROUND CLEANOUT
GW	GREASE WASTE
HB	HOSE BIBB
HD	HUB DRAIN
IND	INDIRECT DRAIN
HW	HOT WATER
P-#	PLUMBING FIXTURE - NUMBER
P.C.	PLUMBING CONTRACTOR
SS	SANITARY SEWER
V	VENT
V.T.R.	VENT THROUGH ROOF
W	WASTE
WCO	WALL CLEANOUT
SD	STORM WATER
HWC	HOW WATER CIRCULATION
IW	ICED WATER (SUPPLY)

DEDUCT ALTERNATES

- ALT #1

**ALTERNATE NO. 1: WEST ENTRANCE CANOPY**  
PROJECT TO INCLUDE ALL WORK EXCEPT:  
  
EPDM roof on tapered insulation on ribbed metal deck (exposed below-painted) on steel frame (exposed and painted) on 3" deep reinforced concrete footings (see structural). Provide metal panel fascia (similar to new East side, ALT. No. 6). Radiant heat tapping slab under canopy to include entrance slab, stairs and ramp.
- ALT #3

**ALTERNATE NO. 3: BRICK WEARING FACE ON NEW RETAINING WALL**  
PROJECT TO INCLUDE ALL WORK EXCEPT:  
  
Add one (1) wythe brick and precast concrete cap to proposed concrete retaining wall at North wall of Pool Equipment Room and West and North walls of Pool Enclosure Base.
- ALT #4

**ALTERNATE NO. 4: BRICK GABLE END WALL**  
PROJECT TO INCLUDE ALL WORK EXCEPT:  
  
Replace proposed polycarbonate envelope at West end with one (1) wythe brick exterior and one (1) wythe brick grille interior on each side of reinforced 8" CMU wall with vent. Bond beam at 12' AFF. Provide 2" rigid insulation at exterior side of CMU.
- ALT #5

**ALTERNATE NO. 5: WEIGHT CONDITIONING FIT OUT**  
PROJECT TO INCLUDE ALL WORK EXCEPT:  
  
Provide all interior walls, flooring, and finishes for V.T. Suite. Area to include electrical and plumbing fixtures and connections.
- ALT #6

**ALTERNATE NO. 6: STAFF BREAK ROOM & EAST ENTRY VESTIBULE**  
PROJECT TO INCLUDE ALL WORK EXCEPT:  
  
EPDM roof on tapered insulation on ribbed metal deck on existing steel channel frame. Provide aluminum storefront window system enclosure. Provide metal panel fascia and soffit. Provide second set of storefront entrance doors. See document set for plans, section, exterior elevations, and interior finishes.
- ALT #7

**ALTERNATE NO. 7: EAST ENTRANCE RAMP AND WALL**  
PROJECT TO INCLUDE ALL WORK EXCEPT:  
  
Provide 10' reinforced concrete wall at North and Northeast sides of new entrance ramp. Provide 5' deep by 6' wide sidewalk on compacted fill with turned down edge at South and Southwest sides. Provide 2.5' OD painted steel pipe rail with stainless steel mesh infill on top of new concrete wall (rail and mesh one side only). See document set for plan, section, and exterior elevations.
- ALT #8

**ALTERNATE NO. 8: AUDIOLOGY FITOUT**  
PROJECT TO INCLUDE ALL WORK EXCEPT:  
  
Provide interior walls, flooring, and finishes for Audiology Suite. Area to include electrical and plumbing fixtures and connections.
- ALT #9

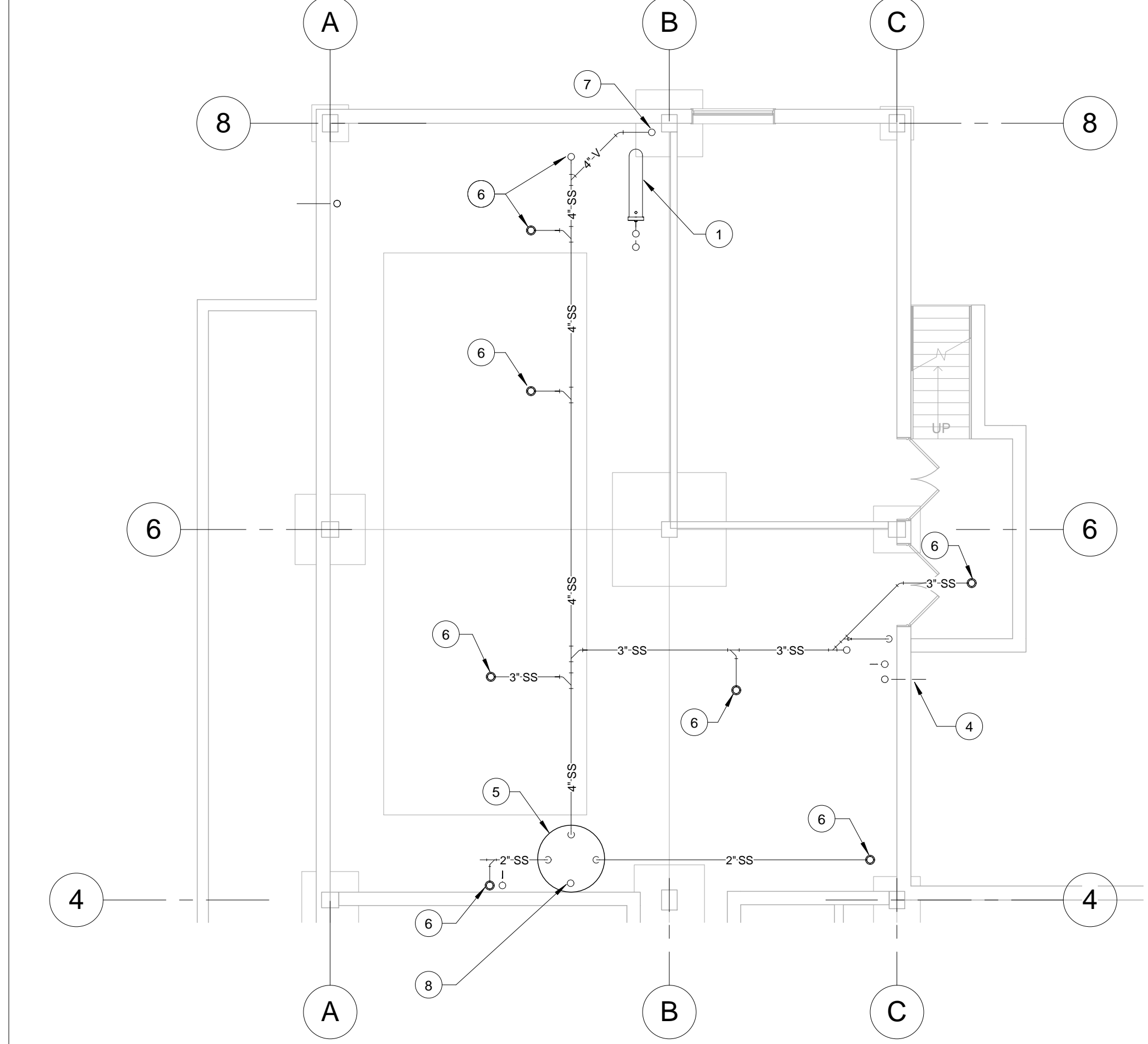
**ALTERNATE NO. 9: VENTILATION DUCTWORK**  
PROJECT TO INCLUDE ALL WORK EXCEPT:  
  
Provide ventilation supply and exhaust ductwork demolition and installation.

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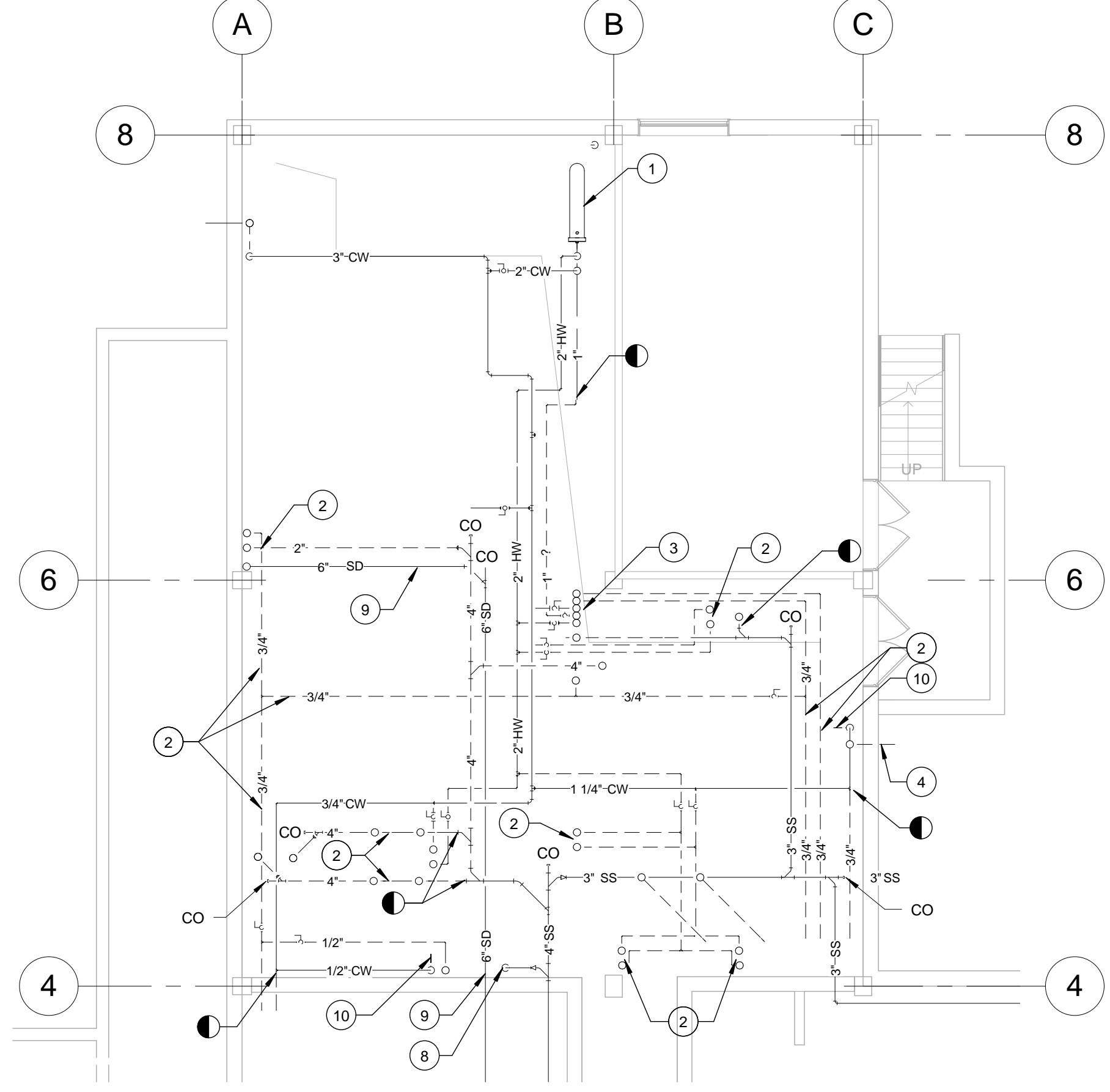
<div>Revisions</div> <div>Date</div>	CONSULTANTS:										PROJECT MANAGER:		Project Number 3627	Scale As indicated	Drawing Title PLUMBING NOTES, ABBREVIATIONS, AND LEGEND		Project Title RENOVATE BUILDING 69		VA Project Number 542-CSI-203	<div>Office of Facilities Management</div> <div>Department of Veterans Affairs</div>	
	<div>Project Manager</div> <div>BRAY MOONEY CONSULTING</div>		<div>Architect</div> <div>WZG, STRUCTURAL FACILITIES SOLUTIONS</div>		<div>Structural Engineer</div> <div>POGEE CONSULTING ENGINEERS</div>		<div>MEP/FP Engineer</div> <div>WZG, STRUCTURAL CONSULTING GROUP</div>		<div>Civil Engineer</div> <div>GUIDON DESIGN</div>		<div>Fire Protection Consultant</div> <div>HARRINGTON GROUP</div>		<div>Cost Estimator</div> <div>BRAY MOONEY CONSULTING</div>		<div>Aquatic Consultant</div> <div>ATLANTIC AQUATIC ENGINEERING</div>		<div>Associate Architects</div> <div>W. COOK ARCHITECTS</div>				
	410 E. 21 STREET CHESTER, PA, 19013 Tel: (610) 872-3716		2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA, 19406 Tel: (610) 270-0599		P.O. BOX 24 40 LITTLE ROAD ZIEGLERVILLE, PA, 19402 Tel: (610) 287-5194		7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC, 27606 Tel: (919) 859-7420		2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 800-6388		7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC, 28227 Tel: (704) 531-9077		410 E. 21 STREET CHESTER, PA, 19013 Tel: (610) 872-3716		1823 DEEP RUN ROAD PIPERSVILLE, PA, 18947 Tel: (215) 786-0409		1251 ROMANSVILLE ROAD COATESVILLE, PA, 19320 Tel: (610) 383-4460				
																	Location 1400 Black Horse Hill, Coatesville, PA		Drawing Number P-001		
														Approved: Project Director		Date 03/29/13		Checked DJR	Drawn ORD	Dwg. 54 of 86	



three inches = one foot  
one and one half inches = one foot  
one inch = one foot  
three quarters inch = one foot  
one half inch = one foot  
three eighths inch = one foot  
one quarter inch = one foot  
one eighth inch = one foot



2 BASEMENT PLUMBING DEMOLITION PLAN - UNDER SLAB  
1/8" = 1'-0"



1 BASEMENT PLUMBING DEMOLITION PLAN - ABOVE CEILING  
1/8" = 1'-0"

KEY	NOTE
1	EXISTING HEAT EXCHANGER TO REMAIN.
2	EXISTING PIPING TO BE DEMOLISHED.
3	EXISTING 3/4" ICED WATER SUPPLY AND RETURN, 2 1/2" CW, 1" HWC, 1 1/2" HW, UP IN CHASE.
4	EXISTING 1" CW TO COOLING TOWER TO BE DEMOLISHED.
5	EXISTING SUMP PUMP TO REMAIN.
6	EXISTING FLOOR DRAIN TO REMAIN.
7	EXISTING 4" VENT TO REMAIN.
8	EXISTING 3" PUMPED DISCHARGE TO REMAIN.
9	EXISTING PIPING TO REMAIN UNDISTURBED.
10	EXISTING 1/2" HOSE BIBB TO REMAIN.

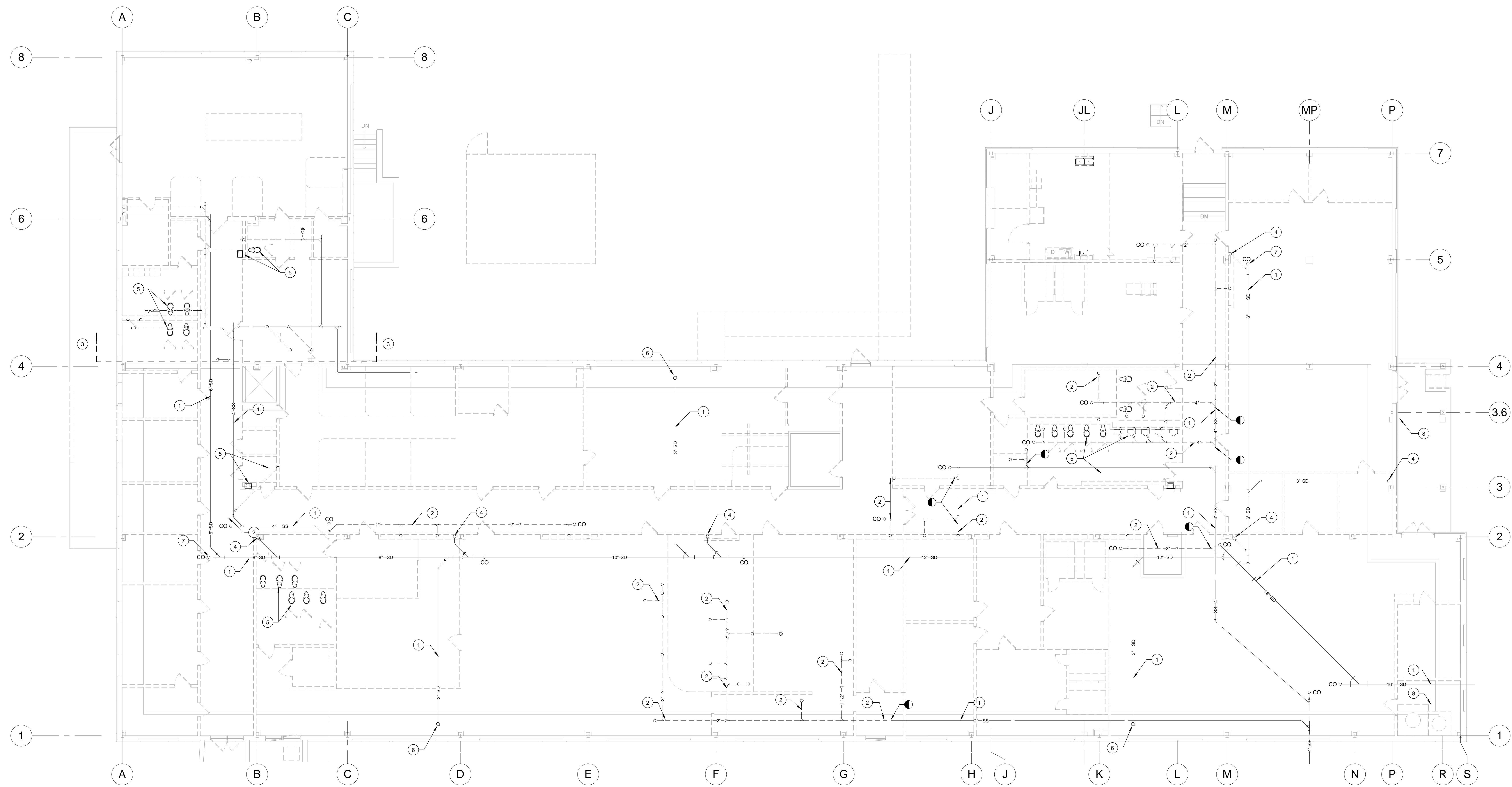
<b>CONSULTANTS:</b>		<b>PROJECT MANAGER:</b>		Project Number 3627		Scale 1/8" = 1'-0"		Drawing Title BASEMENT PLUMBING DEMOLITION PLAN		Project Title RENOVATE BUILDING 69		VA Project Number 542-CSI-203		<b>Office of Facilities Management</b>  Department of Veterans Affairs			
<b>Bray Mooney Consulting</b>		<b>Bray Mooney Consulting</b>		<b>Bray Mooney Consulting</b>		<b>Bray Mooney Consulting</b>		<b>Bray Mooney Consulting</b>		<b>Bray Mooney Consulting</b>		<b>Bray Mooney Consulting</b>					
410 E. 21 STREET CHESTER, PA. 19013 Tel: (610) 872-3716		2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA. 19406 Tel: (610) 270-0599		P.O. BOX 24 40 LITTLE ROAD ZIEGLERVILLE, PA. 19482 Tel: (610) 287-3194		7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC. 27606 Tel: (919) 859-7420		2453 N. DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 600-6388		7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC. 28227 Tel: (704) 531-0077		410 E. 21 STREET CHESTER, PA. 19013 Tel: (610) 872-3716				1823 DEEP RUN ROAD PIPERSVILLE, PA. 18947 Tel: (215) 786-0409	
Revisions		Date		Approved: Project Director		Date 03/29/13		Checked DJR		Drawn ORD		Drawing Number PD101		Dwg. 55 of 86			

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ISSUED FOR BID




three inches = one foot  
one and one half inches = one foot  
one inch = one foot  
three quarters inch = one foot  
one half inch = one foot  
three eighths inch = one foot  
one quarter inch = one foot  
one eighth inch = one foot

KEY	NOTE
1	EXISTING PIPING TO REMAIN UNDISTURBED.
2	EXISTING PIPING TO BE DEMOLISHED.
3	BEYOND THIS POINT REFER TO 1/PD101 BASEMENT DEMOLITION PLAN ABOVE CEILING, FOR FULL SCOPE OF DEMOLITION WORK UNDER 1ST FLOOR SLAB.
4	EXISTING STORM DRAIN RISERS TO REMAIN UNDISTURBED.
5	EXISTING PLUMBING FIXTURES TO BE DEMOLISHED, ASSOCIATED PIPING TO BE REMOVE AS MUCH AS FEASIBLE.
6	EXISTING FLOOR DRAIN IN TUNNEL TO REMAIN.
7	EXISTING STORM DRAIN FLOOR CLEANOUT TO BE DEMOLISHED.
8	EXISTING AIR COMPRESSOR AND ASSOCIATED PIPNG, HOSE REEL, ETC. TO BE DEMOLISHED.



1 1ST FLOOR PLUMBING DEMOLITION PLAN - UNDER SLAB  
1/8" = 1'-0"

FULLY SPRINKLERED  
ISSUED FOR BID

CONSULTANTS:										PROJECT MANAGER:		Project Number 3627	Scale 1/8" = 1'-0"	Drawing Title 1ST FLOOR PLUMBING DEMOLITION PLAN - UNDER SLAB	Project Title RENOVATE BUILDING 69	VA Project Number 542-CSI-203	Office of Facilities Management						
Project Manager BRAY MOONEY CONSULTING 410 E. 21 STREET CHESTER, PA, 19013 Tel: (610) 872-3716		Architect ARRAY HEALTHCARE FACILITIES SOLUTIONS 2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA, 19406 Tel: (610) 270-0599		Structural Engineer WZG, STRUCTURAL CONSULTING ENGINEERS P.O. BOX 24 40 LITTLE ROAD ZIEGLERVILLE, PA, 19482 Tel: (610) 287-5194		MEP/FP Engineer APOGEE CONSULTING GROUP 7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC, 27606 Tel: (919) 659-7420		Civil Engineer GUIDON DESIGN 2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 600-6388		Fire Protection Consultant HARRINGTON GROUP 7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC, 28227 Tel: (704) 531-0077		Cost Estimator BRAY MOONEY CONSULTING 410 E. 21 STREET CHESTER, PA, 19013 Tel: (610) 872-3716		Aquatic Consultant ATLANTIC AQUATIC ENGINEERING 1823 DEEP RUN ROAD PIPPERSVILLE, PA, 18947 Tel: (215) 786-0409		Associate Architects W. COOK ARCHITECTS 1251 ROMANSVILLE ROAD COATESVILLE, PA, 19320 Tel: (610) 383-4460			Building Number 69				
Revisions										Date		Approved: Project Director				Location 1400 Black Horse Hill, Coatesville, PA			Drawing Number PD111		Dwg. 56 of 86		
														Date 03/29/13		Checked DJR		Drawn ORD				 Department of Veterans Affairs	



A

B

C

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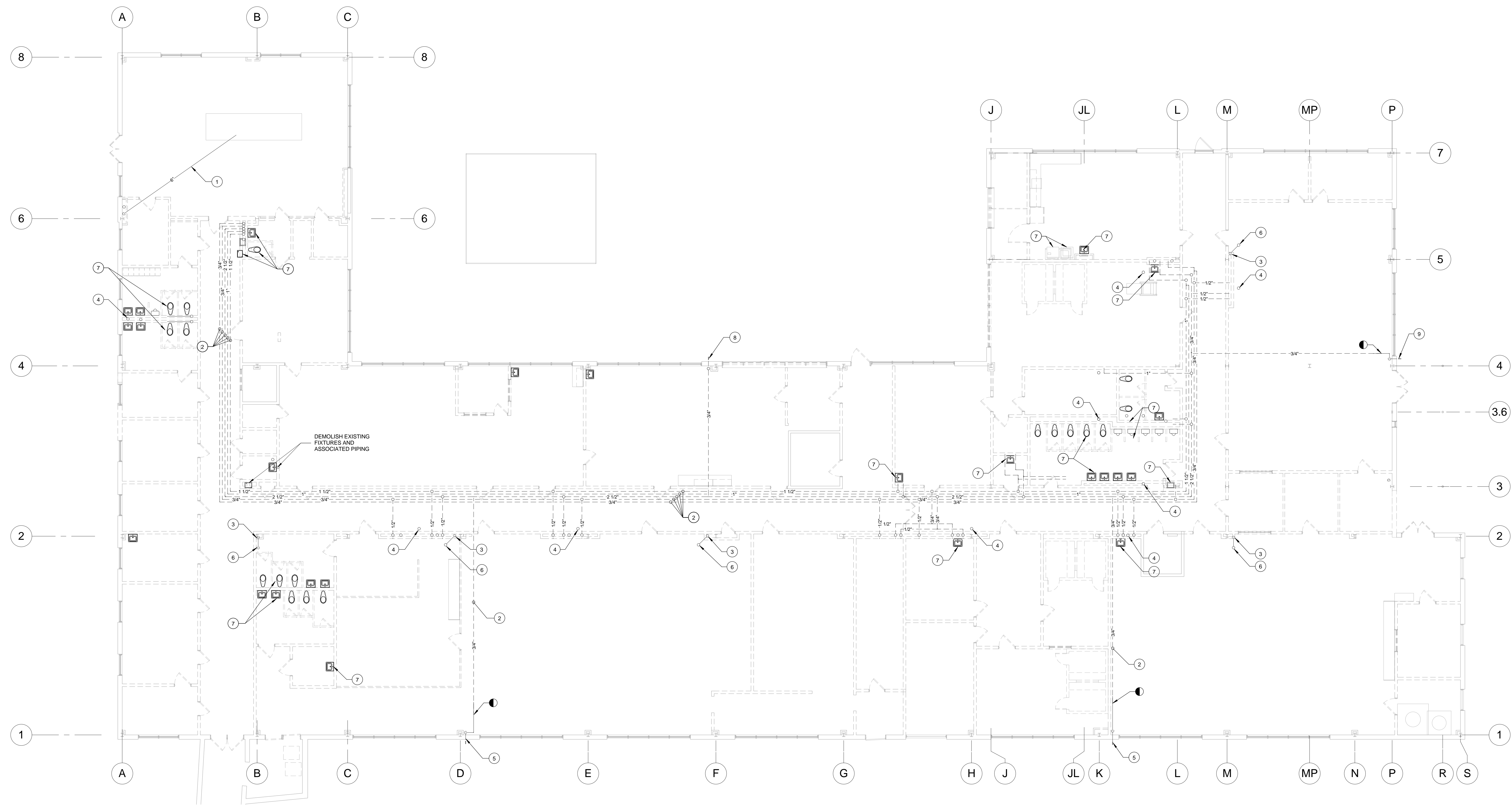
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1

2

three inches = one foot  
one and one half inches = one foot  
one inch = one foot  
three quarters inch = one foot  
one half inch = one foot  
three eighths inch = one foot  
one quarter inch = one foot  
one eighth inch = one foot

KEY	NOTE
1	EXISTING PIPING TO REMAIN UNDISTURBED.
2	EXISTING PIPING TO BE DEMOLISHED.
3	EXISTING STORM DRAIN RISERS TO REMAIN UNDISTURBED.
4	EXISTING VENT THROUGH ROOF (V.T.R.).
5	EXISTING HOSE BIBB TO REMAIN.
6	EXISTING STORM DRAIN PIPE UP TO ROOF DRAIN.
7	EXISTING PLUMBING FIXTURE TO BE DEMOLISHED, ASSOCIATED PIPING TO BE REMOVE AS MUCH AS FEASIBLE.
8	EXISTING HOSE BIBB TO BE RELOCATED.
9	EXISTING HOSE BIBB TO REMAIN UNLESS ALT#6 IS ACCEPTED. IN SUCH CASE THE HOSE BIBB SHALL BE RELOCATED NEARBY.



1 1ST FLOOR PLUMBING DEMOLITION PLAN - ABOVE CEILING  
1/8" = 1'-0"

FULLY SPRINKLERED  
ISSUED FOR BID

<b>CONSULTANTS:</b>		<b>PROJECT MANAGER:</b>		Project Number 3627		Scale 1/8" = 1'-0"		Drawing Title 1ST FLOOR PLUMBING DEMOLITION PLAN - ABOVE CEILING		Project Title RENOVATE BUILDING 69		VA Project Number 542-CSI-203		<b>Office of Facilities Management</b>  Department of Veterans Affairs							
<b>BRAY MOONEY CONSULTING</b> 410 E. 21 STREET CHESTER, PA, 19013 Tel: (610) 872-3716		<b>ARRAY HEALTHCARE FACILITIES SOLUTIONS</b> 2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA, 19406 Tel: (610) 267-0599		<b>WZG, STRUCTURAL CONSULTING ENGINEERS</b> P.O. BOX 24 40 LITTLE ROAD ZIEGLERVILLE, NC, 27096 Tel: (919) 659-7420		<b>APOGEE CONSULTING GROUP</b> 7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC, 27606 Tel: (919) 887-3194		<b>CIVIL ENGINEER</b> GUIDON DESIGN 2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 600-6388		<b>FIRE PROTECTION CONSULTANT</b> HARRINGTON GROUP 7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC, 28227 Tel: (704) 531-9277		<b>COST ESTIMATOR</b> BRAY MOONEY CONSULTING 410 E. 21 STREET CHESTER, PA, 19013 Tel: (610) 872-3716				<b>AQUATIC CONSULTANT</b> ATLANTIC AQUATIC ENGINEERING 1823 DEEP RUN ROAD PIPERSVILLE, PA, 18947 Tel: (215) 786-0409		<b>ASSOCIATE ARCHITECTS</b> W. COOK ARCHITECTS 1251 ROMANSVILLE ROAD COATESVILLE, PA, 19320 Tel: (610) 383-4460		Building Number 69	
Revisions		Date		Approved: Project Director		Location 1400 Black Horse Hill, Coatesville, PA		Date 03/29/13		Checked DJR		Drawn ORD				Drawing Number PD112					



A

three inches = one foot

1

one and one half inches = one foot

B

one and one half inches = one foot

2

one inch = one foot

C

one inch = one foot

3

three quarters inch = one foot

D

one half inch = one foot

E

three eighths inch = one foot

F

one quarter inch = one foot

6

one eighth inch = one foot

4

one eighth inch = one foot

A

three inches = one foot

1

one and one half inches = one foot

B

one and one half inches = one foot

2

one inch = one foot

C

one inch = one foot

3

three quarters inch = one foot

D

one half inch = one foot

E

three eighths inch = one foot

F

one quarter inch = one foot

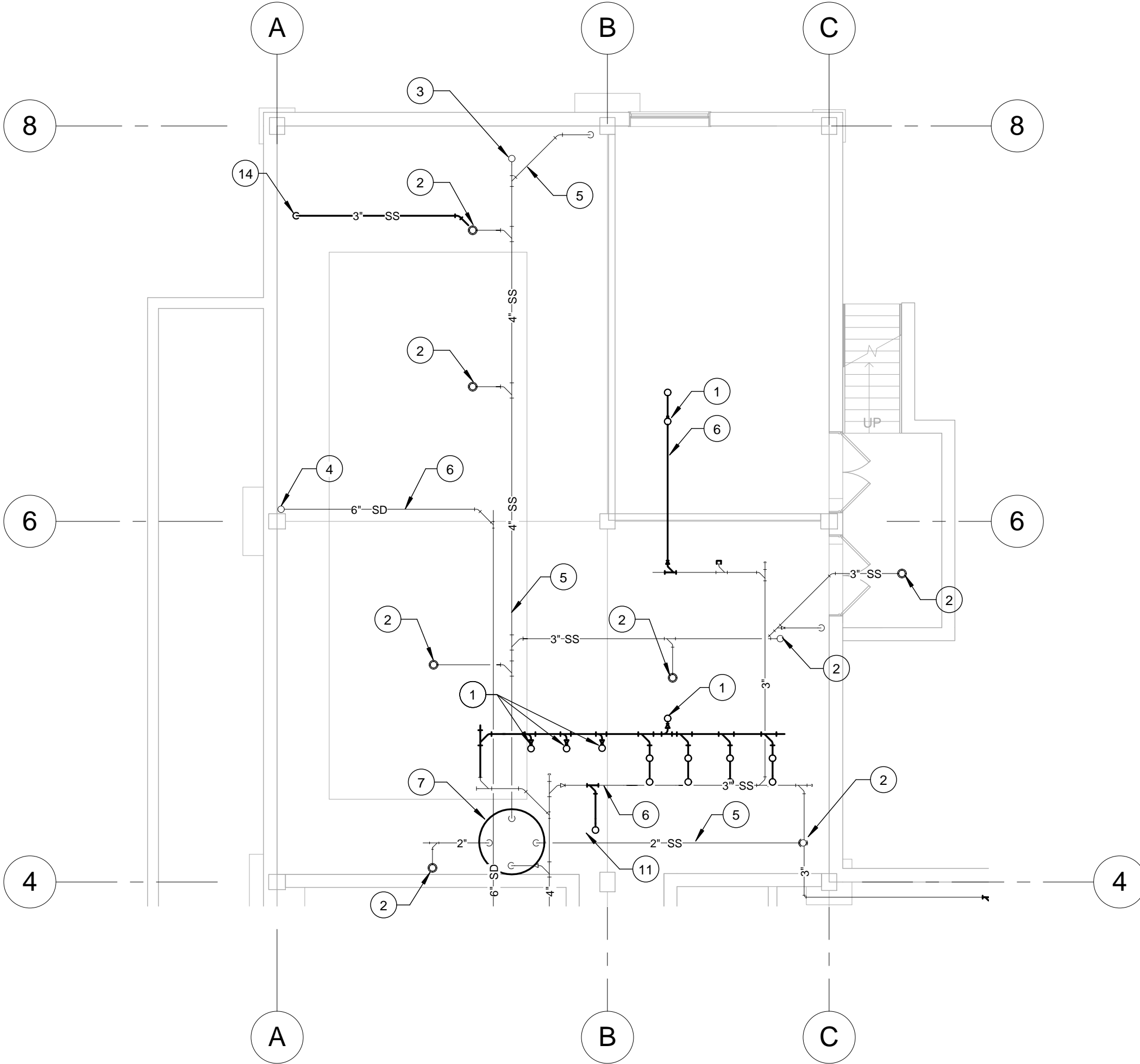
6

one eighth inch = one foot

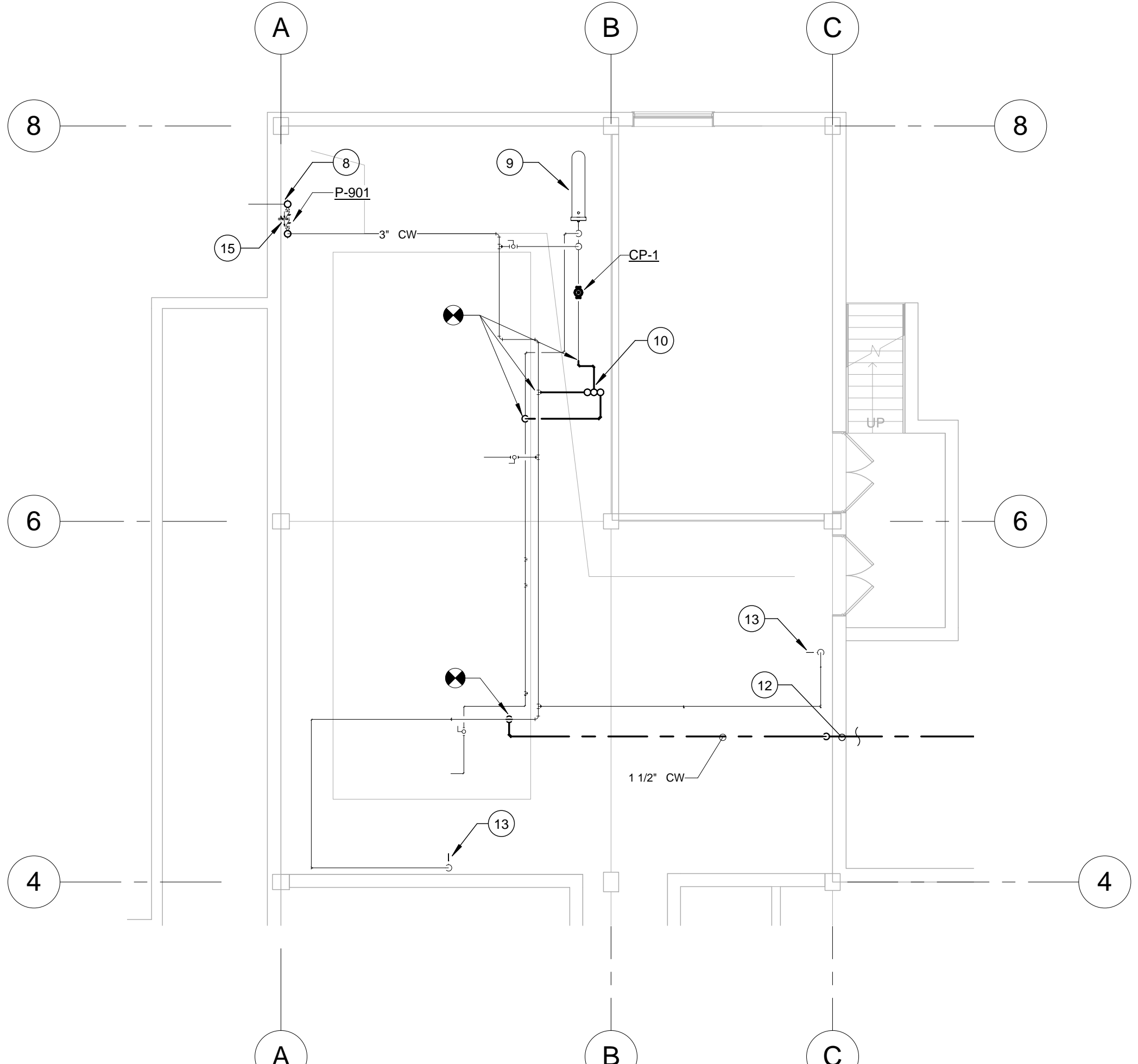
4

one eighth inch = one foot

KEY	NOTE
1	2" SANITARY PIPE UP TO LAVATORIES. SEE 1-PP111 FOR CONTINUATION.
2	EXISTING FLOOR DRAIN.
3	4" END OF LINE CLEANOUT.
4	EXISTING STORM DRAIN PIPE UP TO ROOF DRAIN.
5	PIPE LOCATED UNDER SLAB.
6	PIPE LOCATED BELOW 1ST FLOOR SLAB.
7	EXISTING SUMP.
8	EXISTING DOMESTIC WATER SERVICE ENTRANCE.
9	EXISTING DOMESTIC WATER HEAT EXCHANGER.
10	NEW LOCATION FOR DOMESTIC WATER RISER TO SERVE 1ST FLOOR. SEE 1-PP112 FOR CONTINUATION.
11	3" SANITARY PIPE UP TO FLOOR DRAIN. SEE 1-PP111 FOR CONTINUATION.
12	1 1/2" CW TO POOL ENCLOSURE. RUN PIPE IN SAME TRENCH USED FOR HYDRONIC PIPING. SEE 1-PP112 FOR CONTINUATION.
13	EXISTING HOSE BIBB.
14	NEW 3" SANITARY FROM BACKFLOE PREVENTER AIR GAP TO NEAREST FLOOR DRAIN.
15	NEW REDUCED PRESSURE BACKFLOW PREVENTER.



1 BASEMENT SANITARY PLAN  
1/8" = 1'-0"

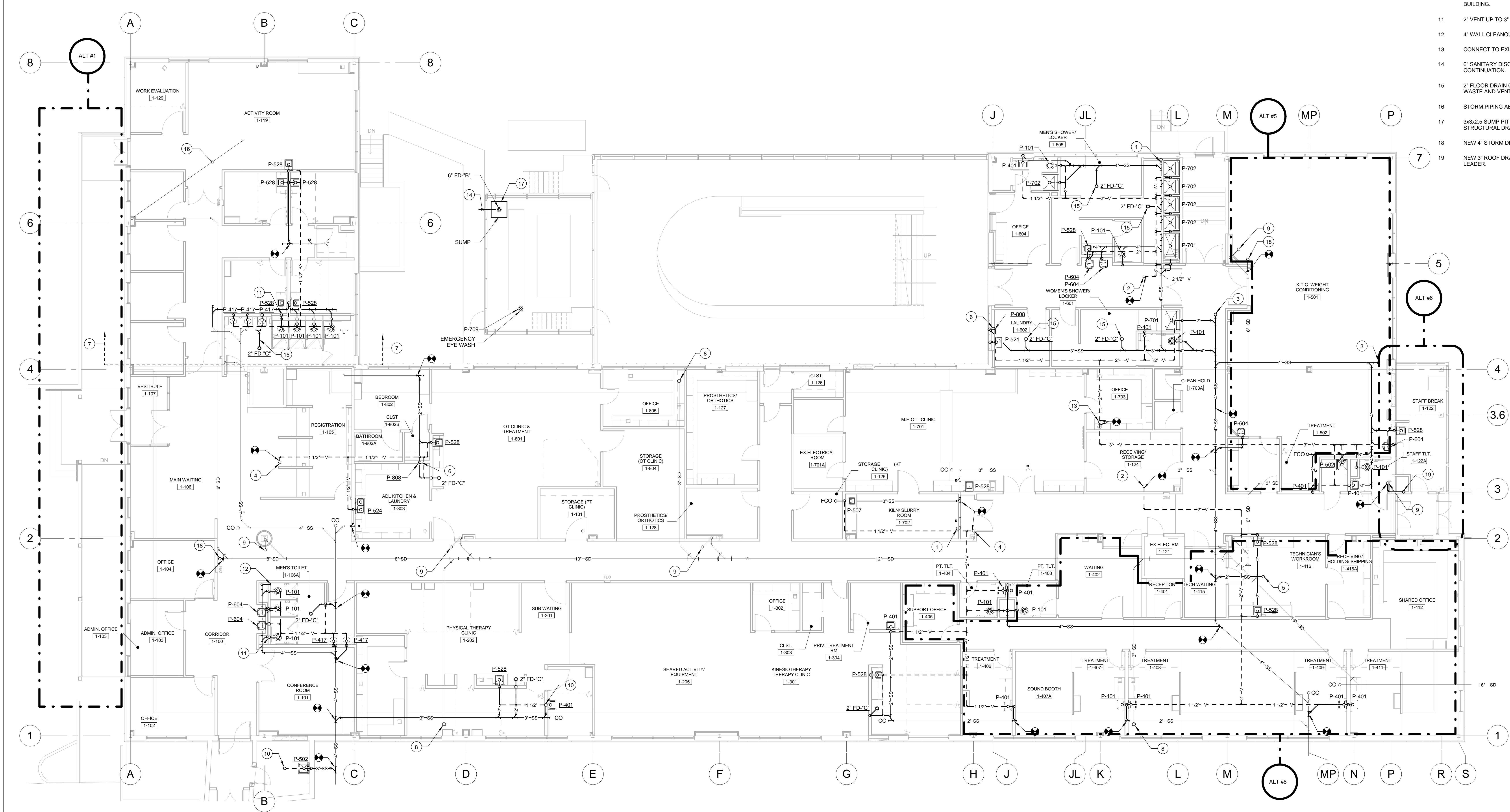


2 BASEMENT DOMESTIC WATER PLAN  
1/8" = 1'-0"

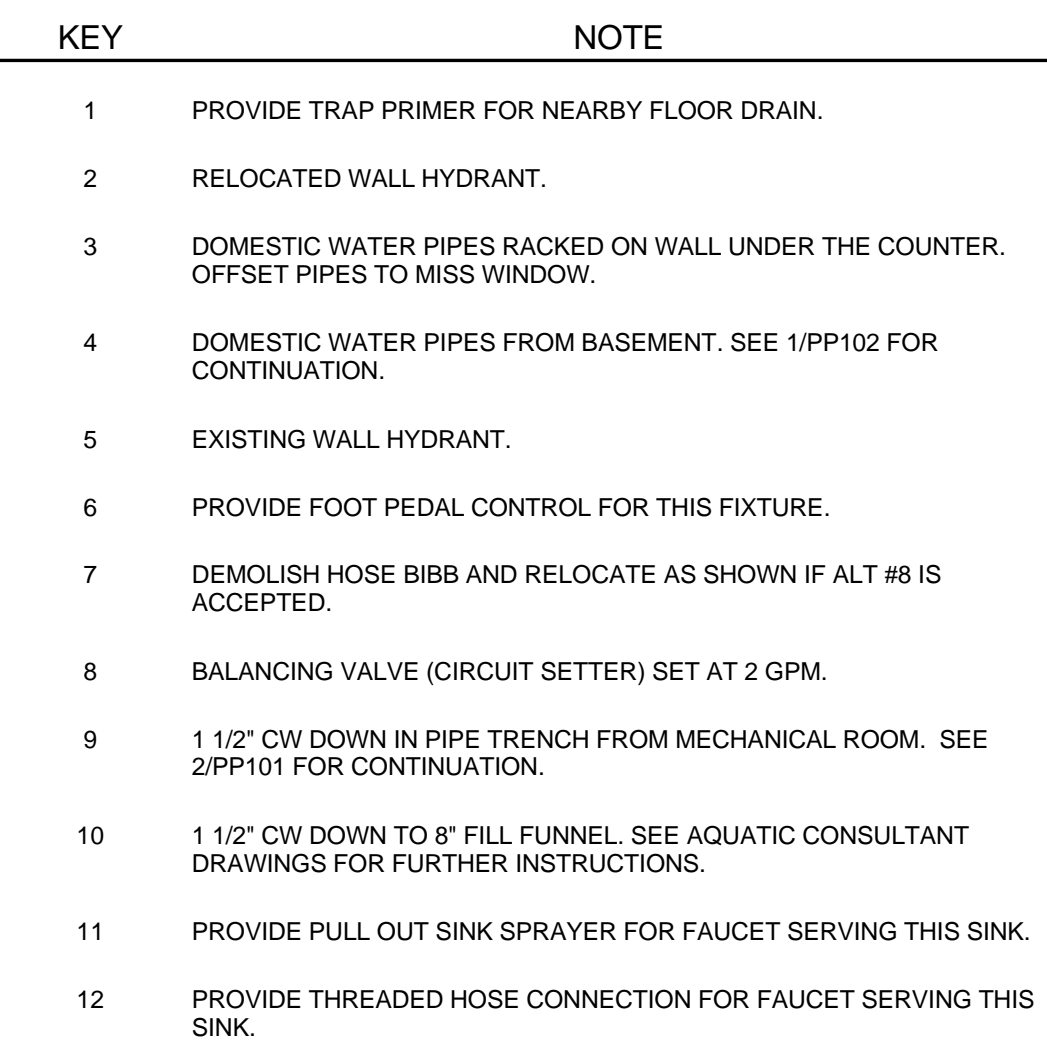
<b>CONSULTANTS:</b>		<b>PROJECT MANAGER:</b>		Project Number 3627	Scale 1/8" = 1'-0"	Drawing Title BASEMENT PLUMBING PLAN		Project Title RENOVATE BUILDING 69		VA Project Number 542-CSI-203	<b>Office of Facilities Management</b>  Department of Veterans Affairs									
<b>Project Manager</b> BRAY MOONEY CONSULTING 410 E. 21 STREET CHESTER, PA, 19013 Tel: (610) 872-3716		<b>Architect</b> ARRAY HEALTHCARE FACILITIES SOLUTIONS 2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA, 19406 Tel: (610) 270-0599		<b>Structural Engineer</b> WZG, STRUCTURAL CONSULTING ENGINEERS P.O. BOX 24 40 LITTLE ROAD ZIEGLERVILLE, PA, 19482 Tel: (610) 287-3194		<b>MEP/FP Engineer</b> APOGEE CONSULTING GROUP 7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC, 27606 Tel: (919) 859-7420		<b>Civil Engineer</b> GUIDON DESIGN 2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 600-6388		<b>Fire Protection Consultant</b> HARRINGTON GROUP 7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC, 28277 Tel: (704) 531-0077		<b>Cost Estimator</b> BRAY MOONEY CONSULTING 410 E. 21 STREET CHESTER, PA, 19013 Tel: (610) 872-3716		<b>Aquatic Consultant</b> ATLANTIC AQUATIC ENGINEERING 1823 DEEP RUN ROAD PIPERSVILLE, PA, 18947 Tel: (215) 786-0409		<b>Associate Architects</b> W. COOK ARCHITECTS 1251 ROMANSVILLE ROAD COATESVILLE, PA, 19320 Tel: (610) 383-4460		Building Number 69		
Revisions		Date		Approved: Project Director		Location 1400 Black Horse Hill, Coatesville, PA		Drawing Number PP101		Dwg. 58 of 86										
						Date 03/29/13		Checked DJR		Drawn ORD										



KEY	NOTE
1	3" WALL CLEANOUT.
2	CONNECT TO EXISTING 2 1/2" V.T.R.
3	4" FLOOR CLEANOUT.
4	CONNECT TO EXISTING 3" V.T.R.
5	2" FLOOR CLEANOUT.
6	WASHER BOX WITH 2" HUB DRAIN.
7	BEYOND THIS POINT REFER TO 1/PP101 BASEMENT PLUMBING DEMOLITION PLAN ABOVE CEILING, FOR FULL SCOPE OF NEW WORK UNDER 1ST FLOOR SLAB.
8	EXISTING FLOOR DRAIN IN TUNNEL.
9	EXISTING STORM DRAIN PIPE UP TO ROOF DRAIN.
10	1 1/2" VENT UP TO 3" VTR, OFFSET AS NECESSARY FOR THE PIPE TO PENETRATE THE ROOF AT LEAST 5' FROM THE EDGE OF THE BUILDING.
11	2" VENT UP TO 3" VTR.
12	4" WALL CLEANOUT.
13	CONNECT TO EXISTING 4" V.T.R.
14	6" SANITARY DISCHARGE FROM THE POOL SUMP. SEE CIVIL FOR CONTINUATION.
15	2" FLOOR DRAIN CONNECTING TO A 3" SS PIPE FOR COMBINATION WASTE AND VENT.
16	STORM PIPING ABOVE CEILING.
17	3x3x2.5 SUMP PIT WITH GRATE. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS.
18	NEW 4" STORM DRAIN FLOOR CLEANOUT.
19	NEW 3" ROOF DRAIN. TIE INTO EXISTING VERTICAL STORM DRAIN LEADER.





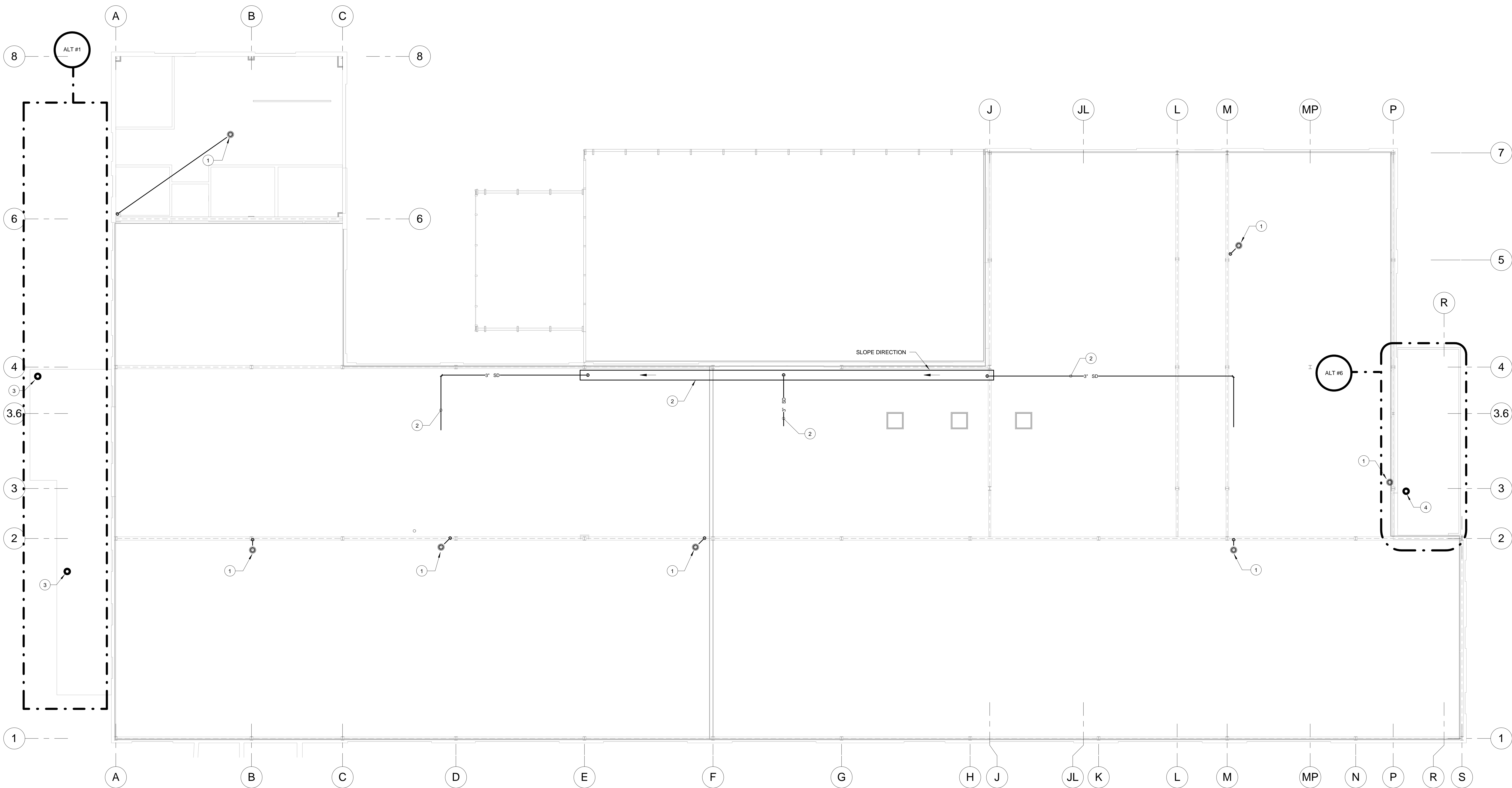


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VA FORM 08-6231, OCT 1978



KEY	NOTE
1	EXISTING ROOF DRAIN.
2	INSTALL 6" SEMI-CIRCULAR ROOF GUTTER @ 2% SLOPE ALONG SIDE POOL ENCLOSURE AND PIPE (3) INDEPENDENT DOWNSPOUTS TO NEARBY EXISTING ROOF DRAIN AS SHOWN.
3	NEW 3" ROOF DRAIN, PIPE DOWN TO DOWNSPOUT NOZZLE TO DISCHARGE ON SPASH BLOCK.
4	NEW 3" ROOF DRAIN TO CONNECT TO EXISTING STORM DRAIN VERTICAL LEADER AS SHOWN ON SHEET PP111.



1 ROOF STORM DRAINAGE PLAN  
1/8" = 1'-0"

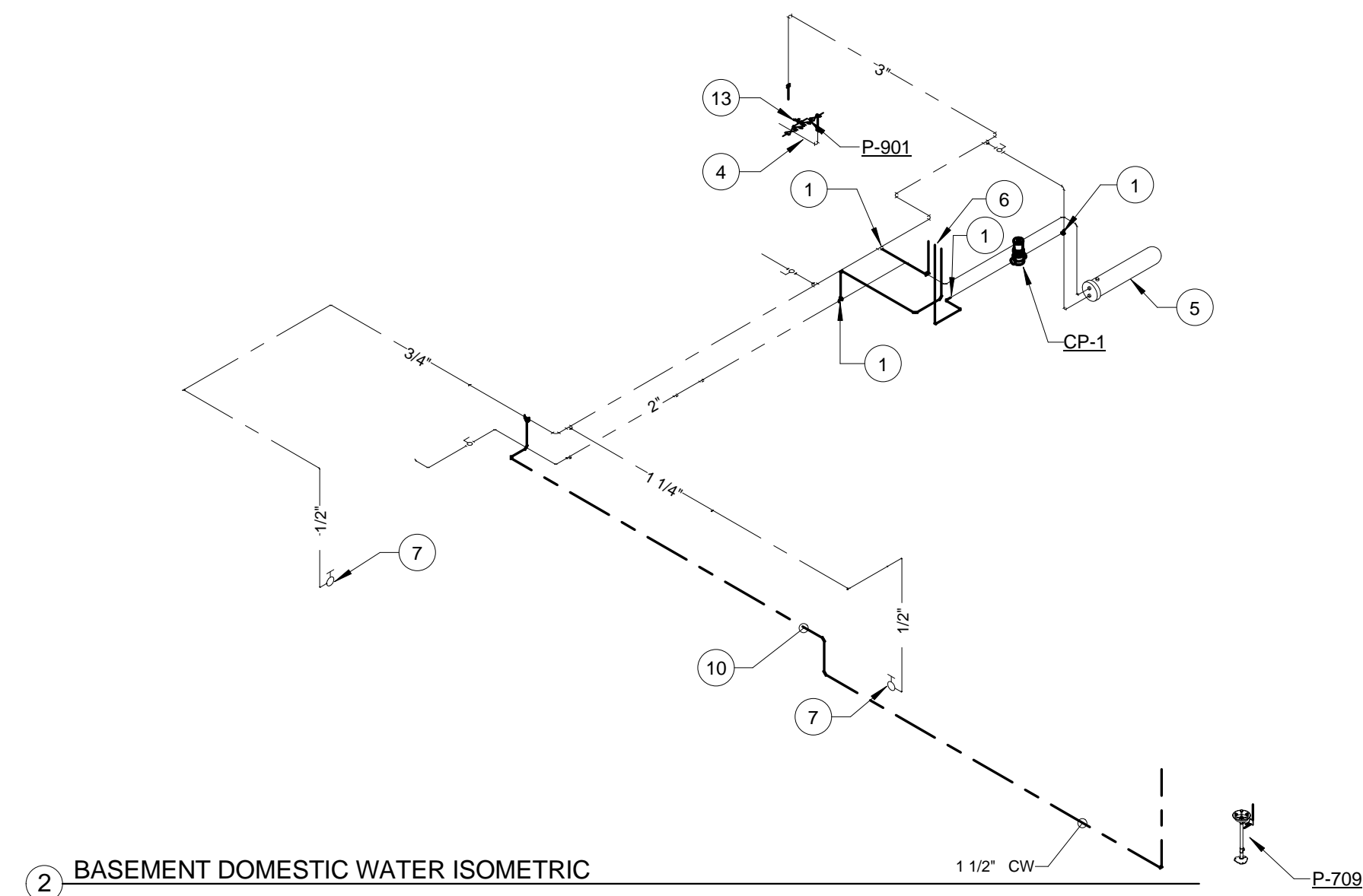
FULLY SPRINKLERED  
ISSUED FOR BID

<b>CONSULTANTS:</b>										<b>PROJECT MANAGER:</b>	Project Number 3627	Scale 1/8" = 1'-0"	Drawing Title ROOF STORM DRAINAGE PLAN	Project Title RENOVATE BUILDING 69	VA Project Number 542-CSI-203	<b>Office of Facilities Management</b>  Department of Veterans Affairs
<small>Project Manager</small> BRAY MOONEY CONSULTING										<b>Bray Mooney Consulting</b>			Approved: Project Director		Building Number 69	
<small>Architect</small> ARRAY HEALTHCARE FACILITIES SOLUTIONS													Location 1400 Black Horse Hill, Coatesville, PA		Drawing Number PP113	
<small>Structural Engineer</small> WZG, STRUCTURAL CONSULTING ENGINEERS													Date 03/29/13		Checked DJR	
<small>MEP/FP Engineer</small> APOGEE CONSULTING GROUP													Drawn ORD		Dwg. 61 of 86	
<small>Civil Engineer</small> GUIDON DESIGN																
<small>Fire Protection Consultant</small> HARRINGTON GROUP																
<small>Cost Estimator</small> BRAY MOONEY CONSULTING																
<small>Aquatic Consultant</small> ATLANTIC AQUATIC ENGINEERING																
<small>Associate Architects</small> W. COOK ARCHITECTS																










KEY	NOTE
1	POINT OF CONNECTION TO EXISTING.
2	EXISTING WALL HYDRANT.
3	RELOCATING WALL HYDRANT.
4	EXISTING DOMESTIC WATER SERVICE ENTRANCE.
5	EXISTING DOMESTIC WATER HEAT EXCHANGER.
6	NEW LOCATION FOR DOMESTIC WATER RISER TO SERVE 1ST FLOOR. SEE 1-PP302 FOR CONTINUATION.
7	EXISTING WALL HYDRANT IN BASEMENT.
8	PIPES DOWN TO MECHANICAL ROOM. SEE 2-PP302 FOR CONTINUATION.
9	DEMOLISH HOSE BIBB AND RELOCATE AS SHOWN IF ALT #6 IS ACCEPTED.
10	1 1/2" CW TO POOL ENCLOSURE. RUN PIPE IN SAME TRENCH USED FOR HYDRONIC PIPING.
11	PIPES DOWN TO PIPE TRENCH. SEE 2-PP302 FOR CONTINUATION.
12	1 1/2" CW DOWN TO 8" FILL FUNNEL. SEE AQUATIC CONSULTANT DRAWINGS FOR FURTHER INSTRUCTIONS.
13	NEW REDUCED PRESSURE BACKFLOW PREVENTER.



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ISSUED FOR BID

	CONSULTANTS:										<div>PROJECT MANAGER:</div> <div><div>Project Number3627</div><div>Scale</div></div> <div><div>BrayMooneyConsulting</div><div>BrayMooneyConsulting</div></div>	Drawing Title		Project Title		VA Project Number		<div>Office of Facilities Management</div>				
	Project Manager		Architect		Structural Engineer		MEP/FP Engineer		Civil Engineer			Fire Protection Consultant		Cost Estimator		Aquatic Consultant			Associate Architects		542-CSI-203	
	BRAY MOONEY CONSULTING		ARRAY HEALTHCARE CONSULTING SOLUTIONS		WZG, STRUCTURAL CONSULTING ENGINEERS		APOGEE CONSULTING GROUP		GUIDON DESIGN			HARRINGTON GROUP		BRAY MOONEY CONSULTING		ATLANTIC AQUATIC ENGINEERING			W. COOK ARCHITECTS		69	
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Revisions		Date		Approved: Project Director		Location		Date		Checked		Drawn		PP302		Dwg. 63 of 86						
						1400 Black Horse Hill, Coatesville, PA		03/29/13		DJR		ORD										



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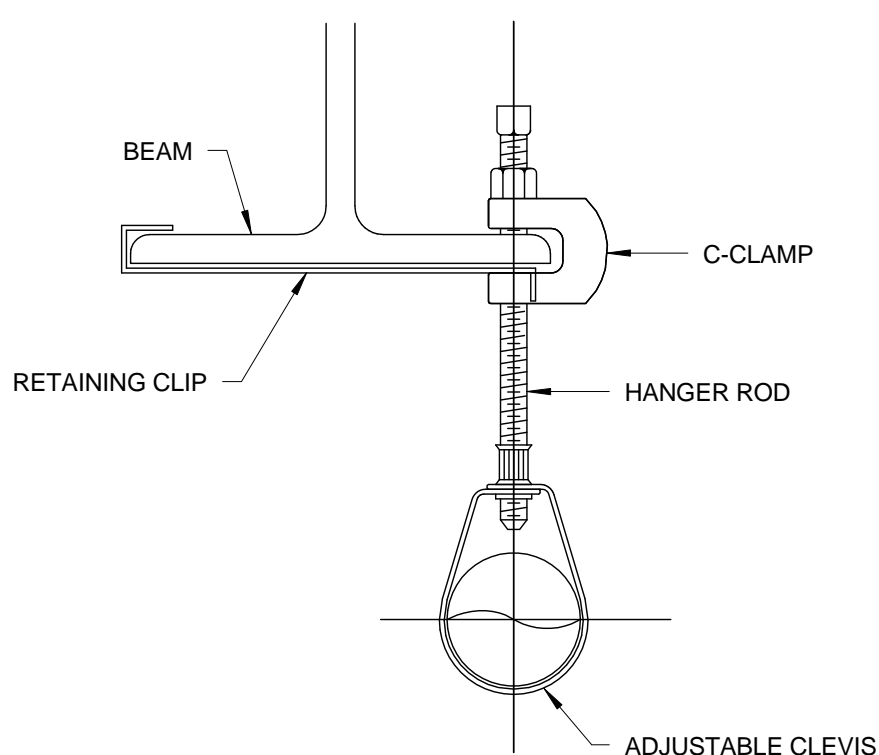
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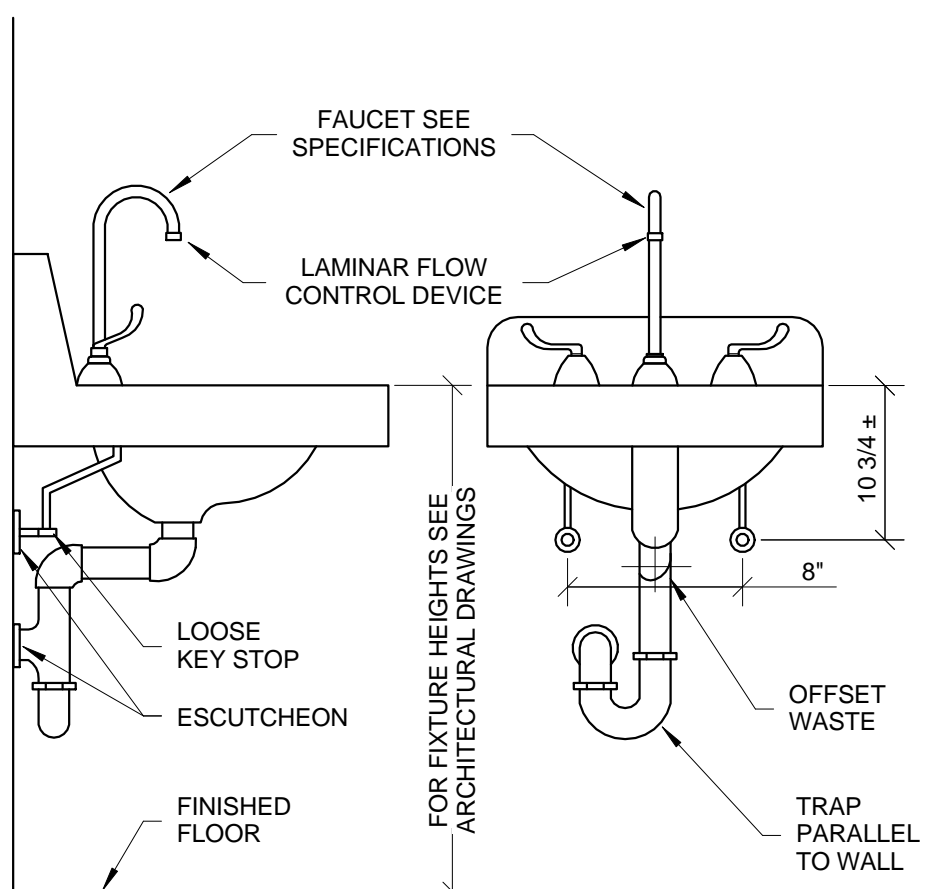
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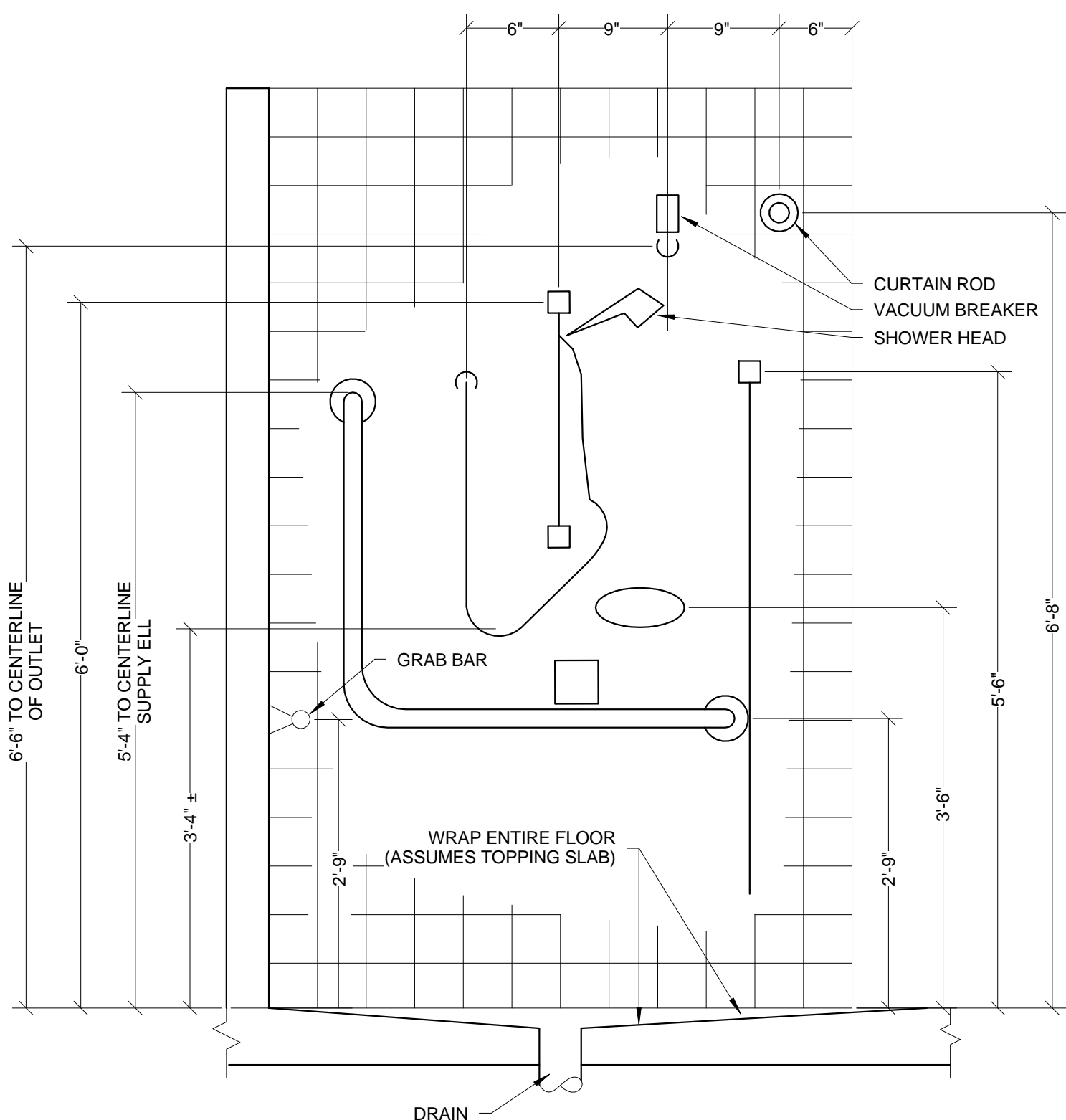
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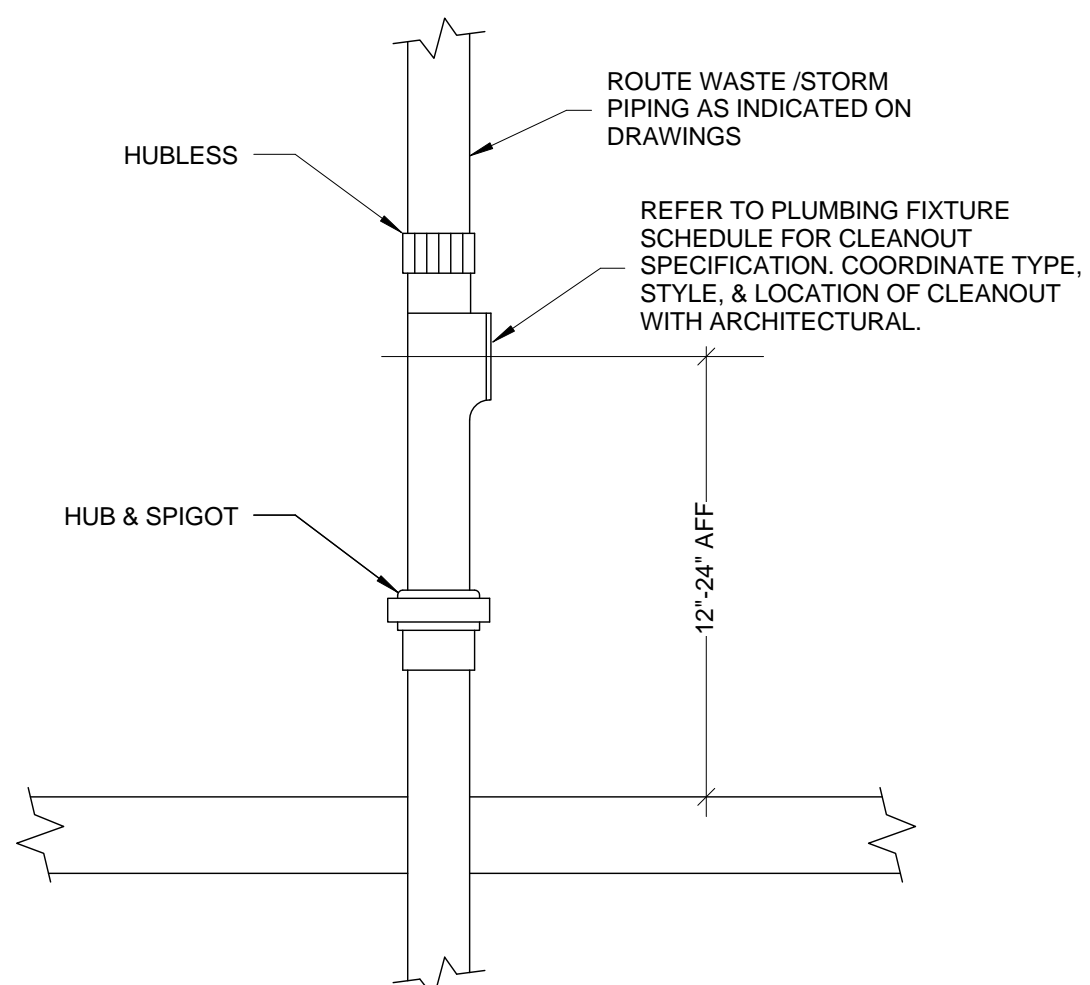
1 C-CLAMP PIPE HANGER DETAIL  
N.T.S.



2 TYPICAL WHEELCHAIR LAVATORY DETAIL  
N.T.S.



3 P-701 PATIENT SHOWER  
N.T.S.



4 WALL CLEANOUT DETAIL  
N.T.S.

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#### PROJECT MANAGER:

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Consulting

Project Number

3627

Scale

As indicated

Drawing Title

PLUMBING DETAILS

Project Title

RENOVATE BUILDING 69

VA Project Number

542-CSI-203

Building Number

69

Drawing Number

PP501

Dwg. 64 of 86

Office of  
Facilities  
Management

Department of  
Veterans Affairs

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Revisions Date



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PLUMBING FIXTURE SCHEDULE										
MARK	DESCRIPTION	WASTE PIPE	VENT PIPE	COLD WATER	HOT WATER	WASTE FIXTURE UNITS	WATER FIXTURE UNITS	WRIST BLADE HANDLES	ELECTRIC SENSOR	REMARKS
P-101	WATER CLOSET FLOOR MOUNTED	4"	2"	1 1/4"		6	10		Yes	
P-401	LAVATORY WALL HUNG	1 1/2"	1 1/2"	1/2"	1/2"	1		Yes	No	
P-417	LAVATORY COUNTER MOUNTED	1 1/2"	1 1/2"	1/2"	1/2"	1	1	Yes	No	
P-502	SINK, SERVICE, FLOOR MOUNTED	3"	1 1/2"	1"	1"	2	4	No	No	
P-507	PLASTER SINK	1 1/2"	1 1/2"	3/4"	3/4"	3	2	No	No	PROVIDE HEAVY CAST IRON PLASTER TRAP
P-521	LAUNDRY TUB WITH LEGS	1 1/2"	1 1/2"	3/4"	3/4"	2	4	No	No	
P-524	KITCHEN SINK DOUBLE COMPARTMENT	1 1/2"	1 1/2"	3/4"	3/4"	3	2	No		
P-528	SINGLE COMPARTMENT HAND SINK	1 1/2"	1 1/2"	3/4"	3/4"	3	2	No	No	SOME LOCATIONS REQUIRE FOOT PEDAL CONTROL. SEE PP112 FOR SPECIFIC INSTANCES.
P-604	WATER COOLER WALL HUNG	1 1/2"	1 1/2"	1/2"	1/2"	0.5	0.5			
P-701	SHOWER ADA COMPLIANT	2"	1 1/2"	1/2"	1/2"	2	2			
P-702	SHOWER	2"	1 1/2"	1/2"	1/2"	2	2			
P-709	EYE/FACE WASH PEDESTAL MOUNTED			3/4"						
P-808	WASHER BOX	2"	1 1/2"	3/4"	3/4"	3	4			
P-901	REDUCED PRESSURE PRINCIPLE ASSEMBLY			3"						LEAD-FREE, VERTICAL FLOW UP, 175 PSI MAXIMUM WORKING WATER PRESSURE, 140 DEG MAXIMUM WORKING WATER TEMPERATURE

CIRCULATOR PUMP SCHEDULE															
MARK	LOCATION	AREA AND/OR BLDG SERVED	SYSTEM AND/OR SERVICE	TYPE	CIRCULATING FLUID					MIN % EFF	ELECTRICAL MOTOR				
					FLUID	FLOW	HEAD	NPSH AVAILABLE	TEMPERATURE		NOMINAL POWER (HP)	PHASE	VOLT	R.P.M.	SPEED CONTROL
CP-1	MECHANICAL RM	BLDG 69	HOT WATER	CIRCULATOR	WATER	2.0 GPM	2.0 FH2O	2.0 FH2O	120 °F	NA	1/40 HP	1	115	3250	NO

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PROJECT MANAGER:



Project Number

3627

Scale

Drawing Title

PLUMBING SCHEDULES

Project Title

RENOVATE BUILDING 69

VA Project Number

542-CSI-203

Building Number

69

Drawing Number

PP601

Dwg. 65 of 86

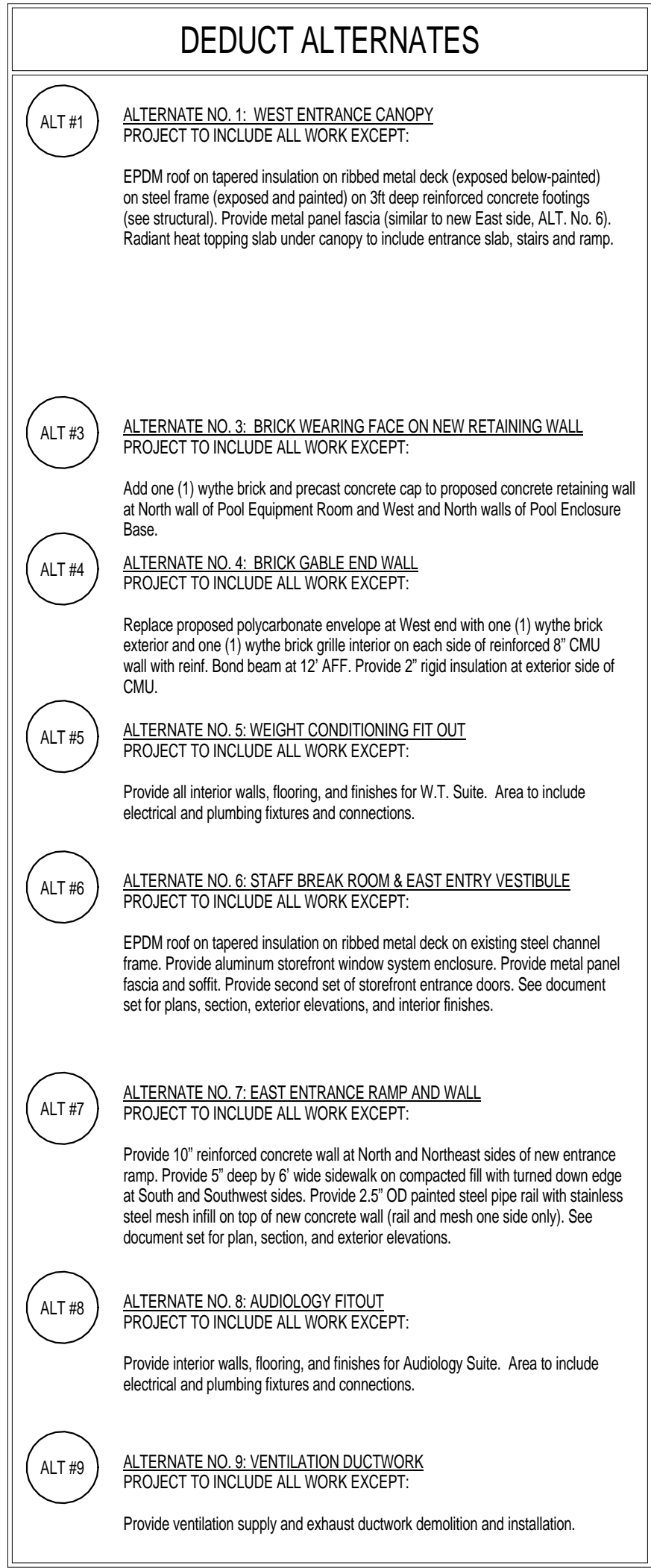
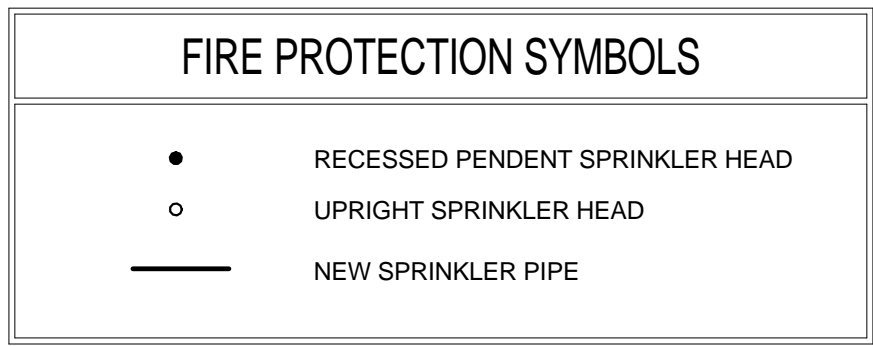
Office of  
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Department of  
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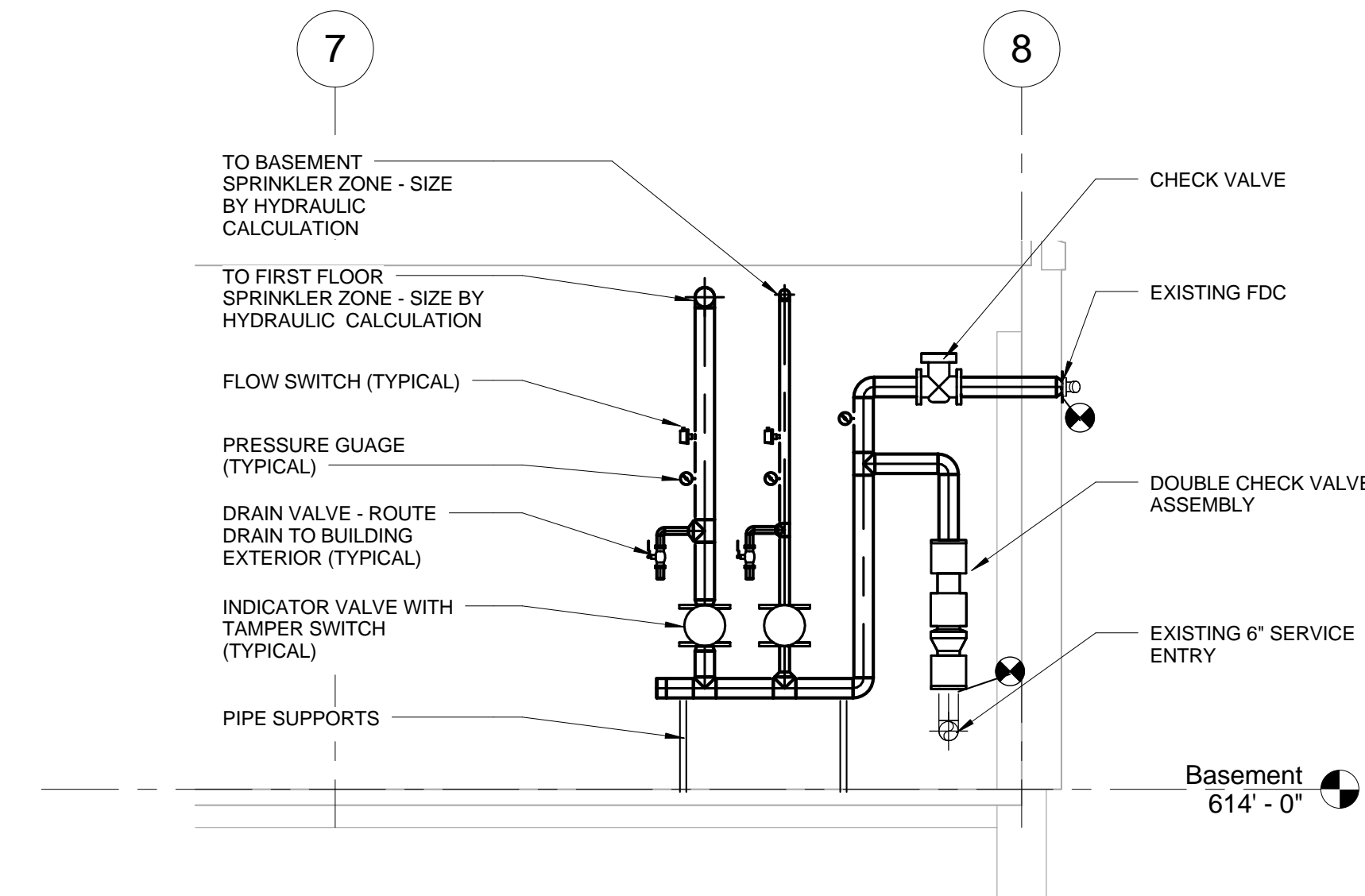
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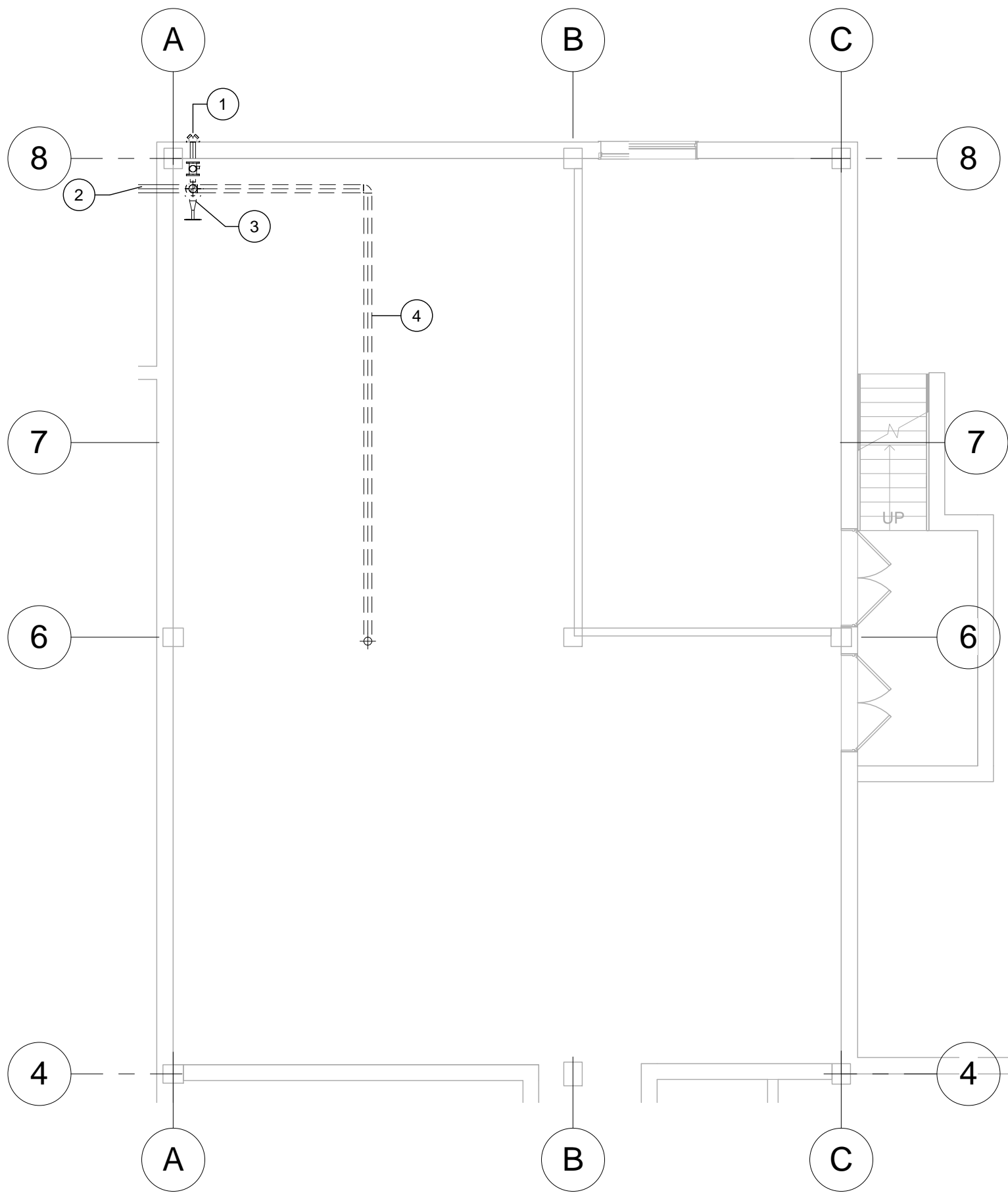


- FIRE SUPPRESSION GENERAL NOTES
- SCOPE OF WORK IS TO REPLACE THE SPRINKLER SYSTEM IN BUILDING 69. THE SPRINKLER SYSTEM SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH NFPA 13, LATEST EDITION, GOVERNMENT REGULATIONS, AND PROJECT DOCUMENTS. SEE SPECIFICATION SECTION 211313.
  - ALL PIPING AND APPURTENANCES SHOWN FOR DIAGRAMMATIC PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGNING AND INSTALLING A SYSTEM THAT COMPLIES WITH NFPA 13, GOVERNMENT REGULATIONS, AND PROJECT DOCUMENTS.
  - THE HAZARD CLASSIFICATIONS OF THE BUILDING INCLUDE LIGHT HAZARD (PATIENT CARE AND TREATMENT AREAS), ORDINARY HAZARD GROUP 1 (MECHANICAL EQUIPMENT ROOMS), AND ORDINARY HAZARD GROUP 2 (STORAGE, CLEAN, AND SOILED UTILITY ROOMS).
  - ALL NEW SPRINKLER SYSTEMS SHALL BE DESIGNED USING THE AREA/DENSITY METHOD OF NFPA 13, LATEST ED.
  - QUICK RESPONSE SPRINKLERS SHALL BE USED THROUGHOUT AS STIPULATED BY NFPA 13. COVERAGE PER SPRINKLER SHALL BE IN COMPLIANCE WITH NFPA 13, LATEST EDITION. USE OF EXTENDED COVERAGE SPRINKLERS SHALL NOT BE PERMITTED.
  - THE SPRINKLER SYSTEM SHALL BE FED FROM THE EXISTING ENTRY POINT IN THE BASEMENT.
  - ALL PIPING 2-1/2 INCH THROUGH 6 INCH MAY BE SCHEDULE 10. ALL PIPE LARGER THAN 6 INCH SHALL BE GALVANIZED. ALL PIPING 2 INCH AND SMALLER SHALL BE SCHEDULE 40. CPVC PIPING IS NOT ALLOWED.
  - ALL EXPOSED PIPING SHALL BE PAINTED IN ACCORDANCE WITH PAINTING SPEC.
  - ALL MATERIALS USED SHALL BE UL LISTED AND FM APPROVED FOR FIRE PROTECTION SERVICE. SPRINKLERS MUST BE FM APPROVED
  - THE CONTRACTOR SHALL RECEIVE WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER OF RECORD PRIOR TO PENETRATION OF ANY STRUCTURAL MEMBER. CONTRACTOR SHALL FORWARD A COPY OF THE APPROVAL TO THE FIRE PROTECTION ENGINEER OF RECORD. IN ADDITION, ALL SEISMIC CALCULATIONS SHALL BE REVIEWED AND APPROVED BY A LICENSED STRUCTURAL ENGINEER PRIOR TO SUBMITTAL.
  - SPRINKLER PIPING SHALL BE SUPPORTED FROM STRUCTURAL MEMBERS WITH APPROVED HANGERS, OR HANGER SYSTEM, SPACED AS PRESCRIBED BY NFPA 13, LATEST EDITION.
  - PIPE VALVES AND FITTINGS USED IN THE SPRINKLER SYSTEM SHALL BE DESIGNED TO WITHSTAND NOT LESS THAN 175 PSI COLD WATER PRESSURE.
  - ALL SPRINKLER SYSTEM INSTALLATIONS SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO FABRICATION AND INSTALLATION. SYSTEM SHALL BE CONFIGURED SO THAT SPRINKLER DISCHARGE IS NOT AFFECTED BY OBSTRUCTIONS SUCH AS BEAMS, DUCTWORK, AND LIGHT FIXTURES.
  - PIPE SLEEVES THROUGH FLOOR AND WALLS SHALL BE SIZED BY SPRINKLER CONTRACTOR STRICKLY IN ACCORDANCE WITH SECTION 9.3.4 OF NFPA 13, LATEST EDITION. GAPS AND VOID SPACES SHALL BE SEALED AROUND THE PIPE SLEEVE AND SYSTEM PIPE WITH A UL LISTED TWO-HOUR FIRE RATE THRU STOP PENETRATING SYSTEM WHERE RATED WALLS AND FLOORS ARE PENETRATED.
  - SPRINKLERS SHALL NOT BE PAINTED.

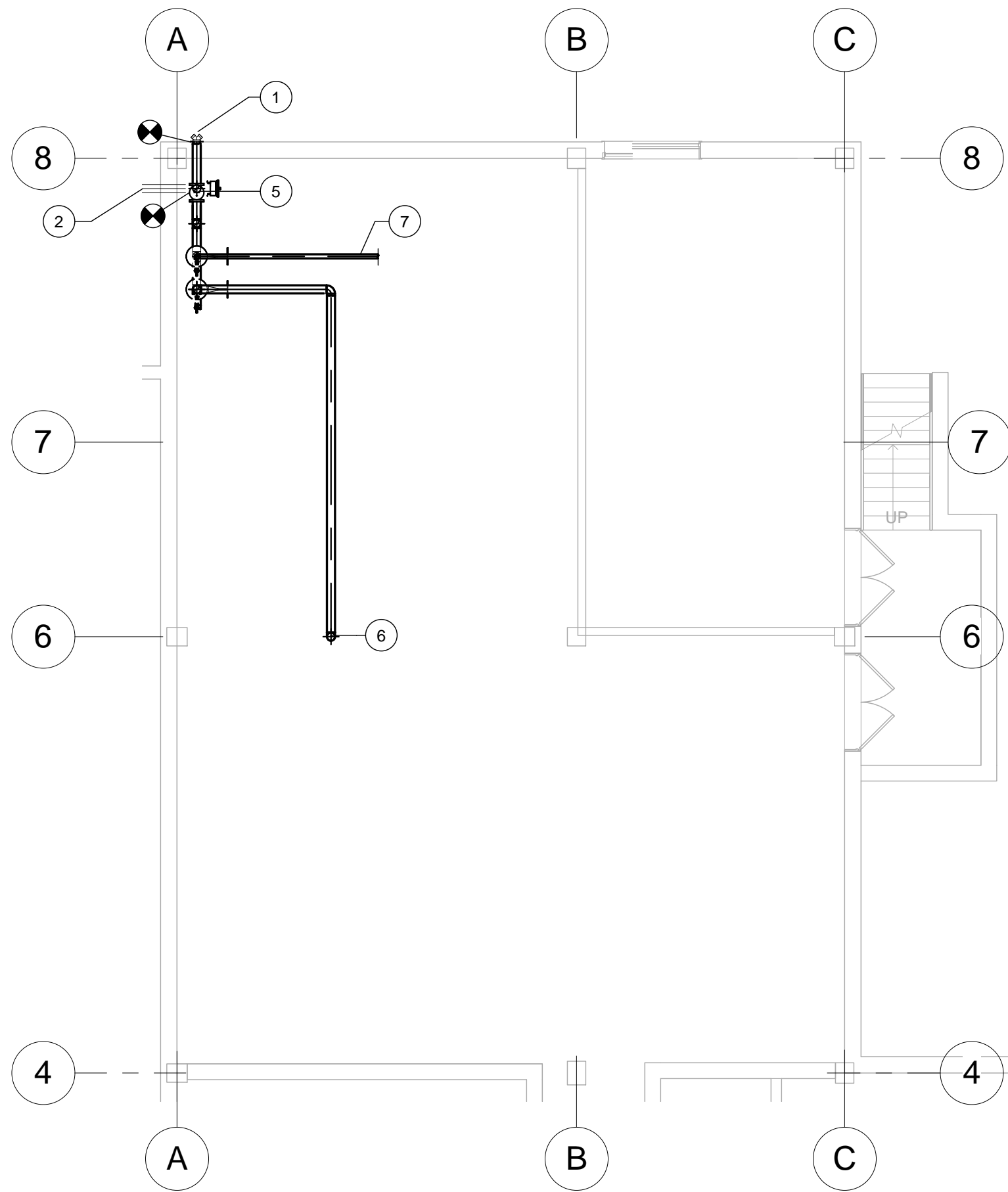
KEY	NOTE
1	EXISTING FIRE DEPARTMENT CONNECTION TO REMAIN.
2	EXISTING 6" FIRE PROTECTION WATER SERVICE ENTRANCE TO REMAIN.
3	EXISTING FIRE RISER TO BE REMOVED TO THE POINT OF FLANGED CONNECTION OF SERVICE ENTRANCE.
4	EXISTING SPRINKLER MAIN AND ASSOCIATED BRANCH PIPING TO BE REMOVED COMPLETE.
5	FIRE RISER. SEE DETAIL 3/F-101
6	SPRINKLER MAIN UP TO FIRST FLOOR
7	SPRINKLER MAIN TO BASEMENT SPRINKLER ZONE



3 FIRE RISER DETAIL  
1/4" = 1'-0"



1 BASEMENT FIRE SUPPRESSION DEMOLITION PLAN  
1/8" = 1'-0"



2 BASEMENT FIRE SUPPRESSION PLAN  
1/8" = 1'-0"

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PROJECT MANAGER:



Project Number

3627

Scale

As indicated

Drawing Title

GENERAL NOTES, LEGEND AND BASEMENT FIRE SUPPRESSION PLANS

Approved: Project Director

Project Title

RENOVATE BUILDING 69

Location

1400 Black Horse Hill, Coatesville, PA

Date

03-29-13

Checked

DJR

Drawn

DJR

VA Project Number

542-CSI-203

Building Number

69

Drawing Number

F-101

Dwg. 66 of 86

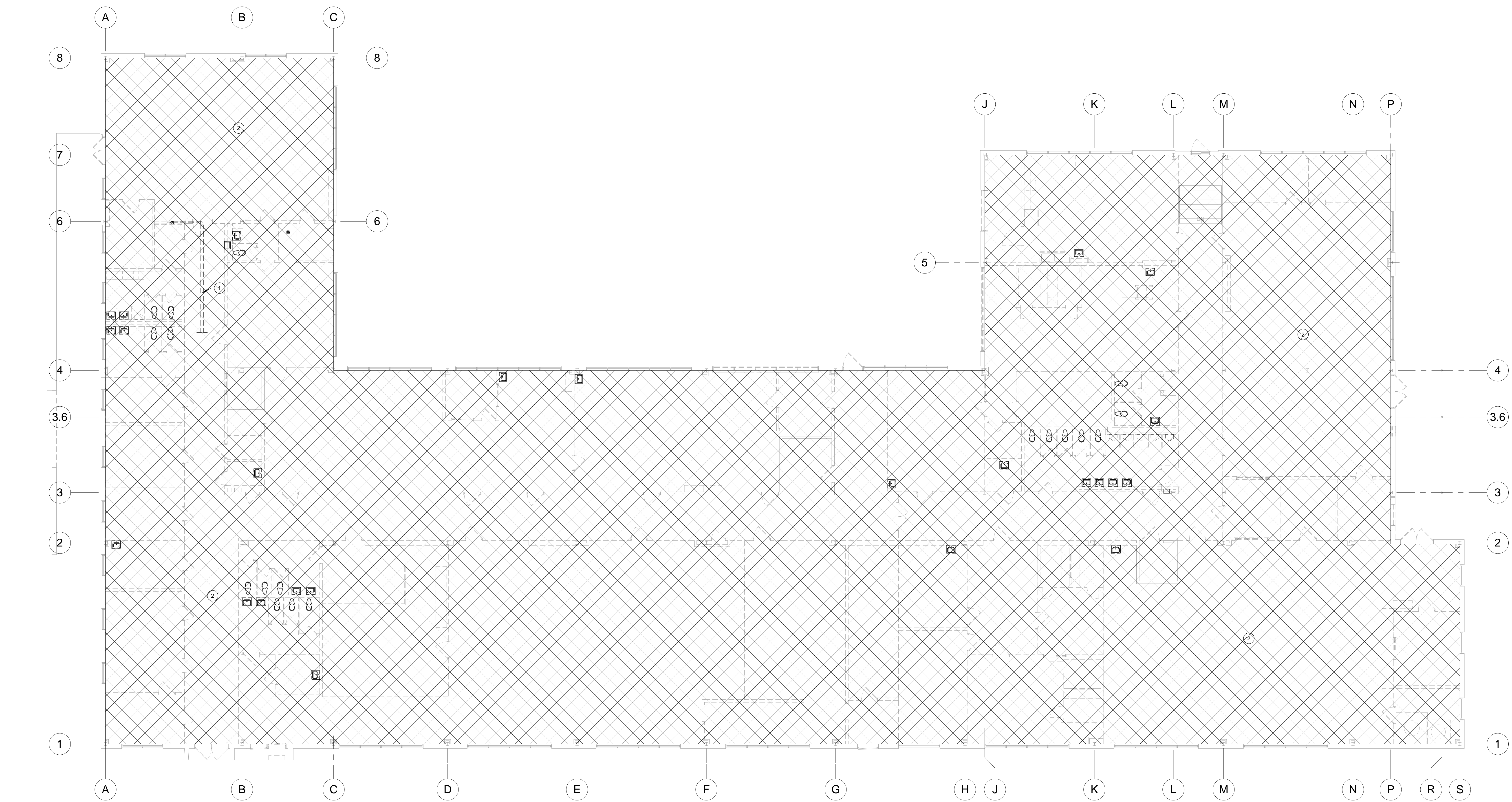
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Facilities  
Management





KEY	NOTE
1	EXISTING SPRINKLER MAIN TO BE REMOVED COMPLETE
2	EXISTING SPRINKLER SYSTEM TO BE REMOVED COMPLETE INCLUDING BRANCH PIPING, SPRINKLER HEADS, PIPE HANGERS, FIRE HOSE CABINETS, ETC.



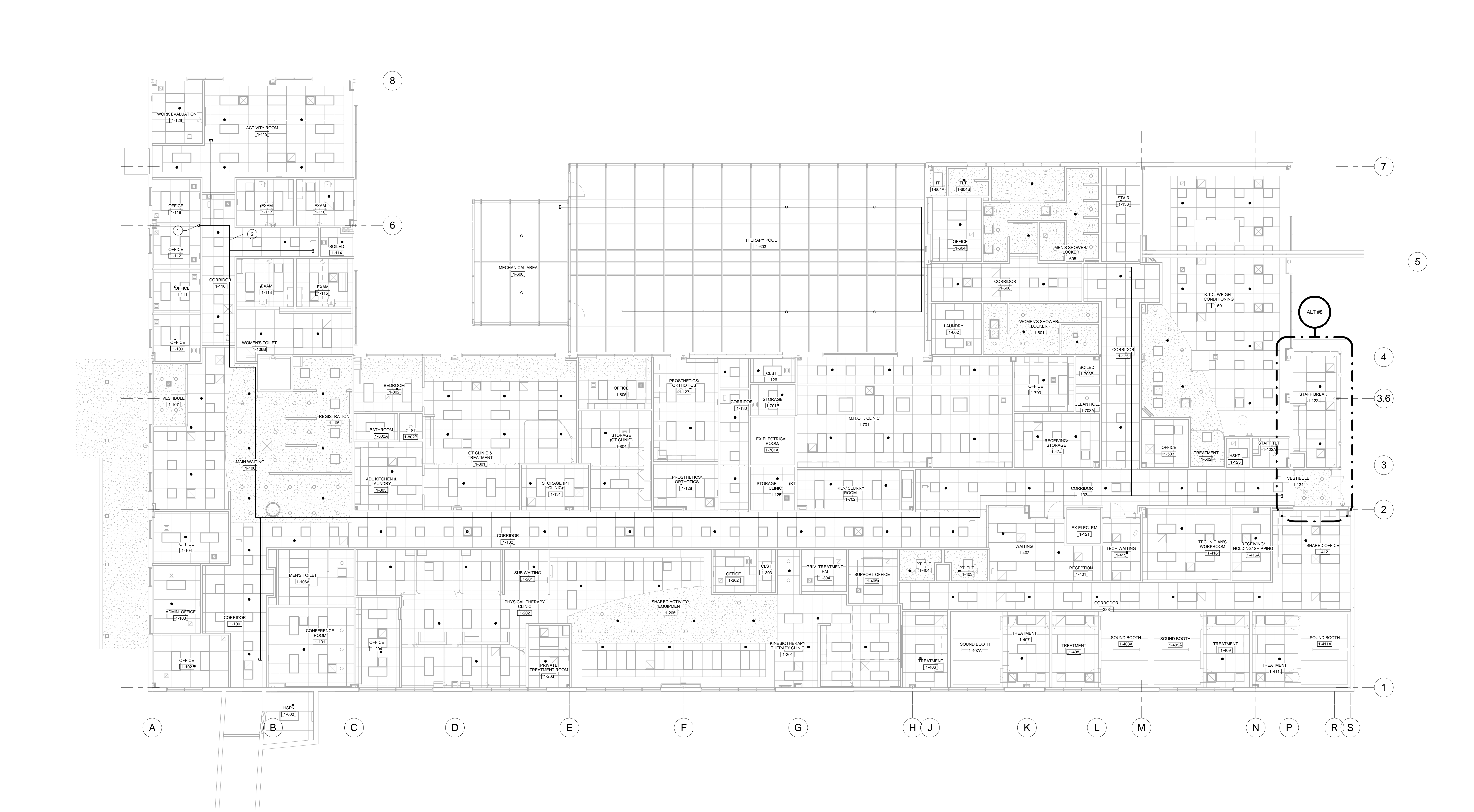
1 1st FLOOR FIRE SUPPRESSION DEMOLITION PLAN  
1/8" = 1'-0"

FULLY SPRINKLERED  
ISSUED FOR BID

<b>CONSULTANTS:</b>		<b>PROJECT MANAGER:</b>		Project Number 3627		Scale 1/8" = 1'-0"		Drawing Title 1ST FLOOR FIRE SUPPRESSION DEMOLITION PLAN		Project Title RENOVATE BUILDING 69		VA Project Number 542-CSI-203		<div>Office of Facilities Management</div> <div>Department of Veterans Affairs</div>							
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Revisions		Date		Approved: Project Director		Location 1400 Black Horse Hill, Coatesville, PA		Date 03-29-13		Checked DJR		Drawn DJR				Drawing Number FD101					
																Dwg. 67 of 86					



KEY	NOTE
1	SPRINKLER MAIN FROM BELOW
2	TO FIRST FLOOR SPRINKLER ZONE. SIZE BY HYDRAULIC CALCULATION.



1 1st FLOOR FIRE SUPPRESSION PLAN  
1/8" = 1'-0"

FULLY SPRINKLERED ISSUED FOR BID																											
<div>Revisions</div> <div>Date</div>		<div>CONSULTANTS:</div> <table><tr><td><div>Project Manager</div><div>BRAY MOONEY CONSULTING</div><div>410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716</div></td><td><div>Architect</div><div>ARRAY HEALTHCARE FACILITIES SOLUTIONS</div><div>2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA 19406 Tel: (610) 270-0599</div></td><td><div>Structural Engineer</div><div>WZG, STRUCTURAL CONSULTING ENGINEERS</div><div>P.O. BOX 24 40 LITTLE ROAD ZIEGLERVILLE, PA 19482 Tel: (610) 287-3194</div></td><td><div>MEP/FP Engineer</div><div>APOGEE CONSULTING GROUP</div><div>7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC 27606 Tel: (919) 859-7420</div></td><td><div>Civil Engineer</div><div>GUIDON DESIGN</div><div>2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 600-6388</div></td><td><div>Fire Protection Consultant</div><div>HARRINGTON GROUP</div><div>7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC 28277 Tel: (704) 531-9077</div></td><td><div>Cost Estimator</div><div>BRAY MOONEY CONSULTING</div><div>410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716</div></td><td><div>Aquatic Consultant</div><div>ATLANTIC AQUATIC ENGINEERING</div><div>1823 DEEP RUN ROAD PIPERSVILLE, PA 18947 Tel: (215) 786-0409</div></td><td><div>Associate Architects</div><div>W. COOK ARCHITECTS</div><div>1251 ROMANSVILLE ROAD COATESVILLE, PA 19320 Tel: (610) 383-4460</div></td></tr></table>								<div>Project Manager</div> <div>BRAY MOONEY CONSULTING</div> <div>410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716</div>	<div>Architect</div> <div>ARRAY HEALTHCARE FACILITIES SOLUTIONS</div> <div>2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA 19406 Tel: (610) 270-0599</div>	<div>Structural Engineer</div> <div>WZG, STRUCTURAL CONSULTING ENGINEERS</div> <div>P.O. BOX 24 40 LITTLE ROAD ZIEGLERVILLE, PA 19482 Tel: (610) 287-3194</div>	<div>MEP/FP Engineer</div> <div>APOGEE CONSULTING GROUP</div> <div>7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC 27606 Tel: (919) 859-7420</div>	<div>Civil Engineer</div> <div>GUIDON DESIGN</div> <div>2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 600-6388</div>	<div>Fire Protection Consultant</div> <div>HARRINGTON GROUP</div> <div>7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC 28277 Tel: (704) 531-9077</div>	<div>Cost Estimator</div> <div>BRAY MOONEY CONSULTING</div> <div>410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716</div>	<div>Aquatic Consultant</div> <div>ATLANTIC AQUATIC ENGINEERING</div> <div>1823 DEEP RUN ROAD PIPERSVILLE, PA 18947 Tel: (215) 786-0409</div>	<div>Associate Architects</div> <div>W. COOK ARCHITECTS</div> <div>1251 ROMANSVILLE ROAD COATESVILLE, PA 19320 Tel: (610) 383-4460</div>	<div>PROJECT MANAGER:</div> <div>Project Number 3627</div> <div>Scale 1/8" = 1'-0"</div>		<div>Drawing Title 1ST FLOOR FIRE SUPPRESSION PLAN</div> <div>Approved: Project Director</div>		<div>Project Title RENOVATE BUILDING 69</div> <div>Location 1400 Black Horse Hill, Coatesville, PA</div> <div><div>Date 03-29-13</div><div>Checked DJR</div><div>Drawn DJR</div></div>		<div>VA Project Number 542-CSI-203</div> <div>Building Number 69</div> <div>Drawing Number FX101</div> <div>Dwg. 68 of 86</div>	<div>Office of Facilities Management</div> <div><div>Department of Veterans Affairs</div></div>	
		<div>Project Manager</div> <div>BRAY MOONEY CONSULTING</div> <div>410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716</div>	<div>Architect</div> <div>ARRAY HEALTHCARE FACILITIES SOLUTIONS</div> <div>2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA 19406 Tel: (610) 270-0599</div>	<div>Structural Engineer</div> <div>WZG, STRUCTURAL CONSULTING ENGINEERS</div> <div>P.O. BOX 24 40 LITTLE ROAD ZIEGLERVILLE, PA 19482 Tel: (610) 287-3194</div>	<div>MEP/FP Engineer</div> <div>APOGEE CONSULTING GROUP</div> <div>7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC 27606 Tel: (919) 859-7420</div>	<div>Civil Engineer</div> <div>GUIDON DESIGN</div> <div>2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 600-6388</div>	<div>Fire Protection Consultant</div> <div>HARRINGTON GROUP</div> <div>7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC 28277 Tel: (704) 531-9077</div>	<div>Cost Estimator</div> <div>BRAY MOONEY CONSULTING</div> <div>410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716</div>	<div>Aquatic Consultant</div> <div>ATLANTIC AQUATIC ENGINEERING</div> <div>1823 DEEP RUN ROAD PIPERSVILLE, PA 18947 Tel: (215) 786-0409</div>	<div>Associate Architects</div> <div>W. COOK ARCHITECTS</div> <div>1251 ROMANSVILLE ROAD COATESVILLE, PA 19320 Tel: (610) 383-4460</div>																	

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DEDUCT ALTERNATES

ALT #1	ALTERNATE NO. 1 - WEST ENTRANCE CANOPY PROJECT TO INCLUDE ALL WORK EXCEPT:  EPDM roof on tapered insulation on ribbed metal deck (exposed below-painted) on steel frame (exposed and painted) on 3" deep reinforced concrete footings (see structural). Provide metal panel fascia (similar to new East side, ALT. No. 6). Radiant heat topping slab under canopy to include entrance slab, stairs and ramp.
ALT #3	ALTERNATE NO. 3 - BRICK WEARING FACE ON NEW RETAINING WALL PROJECT TO INCLUDE ALL WORK EXCEPT:  Add one (1) wythe brick and precast concrete cap to proposed concrete retaining wall at North wall of Pool Equipment Room and West and North walls of Pool Enclosure Base.
ALT #4	ALTERNATE NO. 4 - BRICK GABLE END WALL PROJECT TO INCLUDE ALL WORK EXCEPT:  Replace proposed polycarbonate envelope at West end with one (1) wythe brick exterior and one (1) wythe brick grille interior on each side of reinforced 8" CMU wall with rebar. Bond beam at 12' AFF. Provide 2" rigid insulation at exterior side of CMU.
ALT #5	ALTERNATE NO. 5 - WEIGHT CONDITIONING FIT OUT PROJECT TO INCLUDE ALL WORK EXCEPT:  Provide all interior walls, flooring, and finishes for W.T. Suite. Area to include electrical and plumbing fixtures and connections.
ALT #6	ALTERNATE NO. 6 - STAFF BREAK ROOM & EAST ENTRY VESTIBULE PROJECT TO INCLUDE ALL WORK EXCEPT:  EPDM roof on tapered insulation on ribbed metal deck on existing steel channel frame. Provide aluminum storefront window system enclosure. Provide metal panel fascia and soffit. Provide second set of storefront entrance doors. See document set for plans, section, exterior elevations, and interior finishes.
ALT #7	ALTERNATE NO. 7 - EAST ENTRANCE RAMP AND WALL PROJECT TO INCLUDE ALL WORK EXCEPT:  Provide 10" reinforced concrete wall at North and Northeast sides of new entrance ramp. Provide 5' deep by 6' wide sidewalk on compacted fill with turned down edge at South and Southwest sides. Provide 2.5" OD painted steel pipe rail with stainless steel mesh infill on top of new concrete wall (rail and mesh are one side only). See document set for plan, section, and exterior elevations.
ALT #8	ALTERNATE NO. 8 - AUDIOLOGY FITOUT PROJECT TO INCLUDE ALL WORK EXCEPT:  Provide interior walls, flooring, and finishes for Audiology Suite. Area to include electrical and plumbing fixtures and connections.
ALT #9	ALTERNATE NO. 9 - VENTILATION DUCTWORK PROJECT TO INCLUDE ALL WORK EXCEPT:  Provide ventilation supply and exhaust outwork demolition and installation.

ELECTRICAL LEGEND

	120V DUPLEX RECEPTACLE: 18" AFF STANDARD
	120V DUPLEX RECEPTACLE: GFI 18" AFF STANDARD
	120V DUPLEX RECEPTACLE: GFI 44" AFF STANDARD
	120V DUPLEX RECEPTACLE: GFI 48" AFF STANDARD
	120V DUPLEX RECEPTACLE: WEATHERPROOF GFI
	120V DEDICATED DUPLEX RECEPTACLE: REFRIGERATOR GFI
	120V DEDICATED DUPLEX RECEPTACLE: MICROWAVE
	120V DEDICATED DUPLEX RECEPTACLE: TREADMILL 18" AFF STANDARD
	120V DEDICATED DUPLEX RECEPTACLE: DISHWASHER 18" AFF STANDARD
	120V DEDICATED DUPLEX RECEPTACLE: WASHER 44" AFF STANDARD
	120V DEDICATED DUPLEX RECEPTACLE: WATER COOLER
	120V QUADRUPEX RECEPTACLE: 18" AFF STANDARD
	120V QUADRUPEX RECEPTACLE: GFI 18" AFF STANDARD
	220V DEDICATED RECEPTACLE: DRYER 44" AFF STANDARD
	DATA/TELCO OUTLET: 18" AFF STANDARD UNO; SEE DETAIL 10/E-501
	DATA OUTLET: 18" AFF STANDARD UNO
	WALL TELCO OUTLET: 48" AFF STANDARD UNO
	TELEVISION - CATV
	DISCONNECT SWITCH NON-FUSED
	DISCONNECT SWITCH FUSED
	SINGLE POLE WALL SWITCH: 44" AFF STANDARD UNO
	TWO GANG SINGLE POLE WALL SWITCH: 44" AFF STANDARD UNO
	THREE WAY WALL SWITCH: 44" AFF STANDARD UNO
	TWO GANG THREE WAY WALL SWITCH: 44" AFF STANDARD UNO
	FOUR WAY WALL SWITCH: 44" AFF STANDARD UNO
	DIMMER WALL SWITCH: 44" AFF STANDARD UNO
	MOTOR RATED SWITCH: 44" AFF STANDARD UNO
	CARD READER: 46" AFF STANDARD UNO
	KEY PAD: 46" AFF STANDARD UNO
	SPEAKER
	BELL
	CAMERA
	PANIC BUTTON: 46" AFF STANDARD UNO

ABBREVIATIONS

1PH 1P 2C 3C 3PH 4C 4W A/C UNIT A/E AAP AC	SINGLE-PHASE SINGLE POLE TWO-CONDUCTOR THREE-CONDUCTOR THREE-PHASE FOUR-CONDUCTOR FOUR-WIRE AIR CONDITIONING UNIT ARCHITECT/ENGINEER ALARM ANNUNCIATOR PANEL ALTERNATING CURRENT OR ARMORED CABLE	DB DC DCP DEG C DEG F DEMO DIAG DISC DISTR DISTR PL DMR SW DN DOWN	DECIBEL OR DIRECT BURIAL DIRECT CURRENT DIMMER CONTROL PANEL DEGREES CELSIUS DEGREES FAHRENHEIT DEMOLITION DIAGRAM DISCONNECT DISTRIBUTION DISTRIBUTION PANEL DIMMER SWITCH DOWN	LED LF LM LPS LRA LTCP LTG LTG PNL LTNG LV	LIGHT EMITTING DIODE LINEAR FEET (FOOT) LUMEN LIGHT POLE LOW PRESSURE SODIUM LOCKED ROTAR AMPS LOCAL TEMPERATURE CONTROL PANEL LIGHT LIGHTING LIGHTING PANEL LIGHTNING LOW VOLTAGE	SHT SI SPEC SPST SURF SW SWBD SWGR TC TEL TP TPS TTB TV TYP	SHEET INTERNATIONAL SYSTEM OF UNITS SPECIFICATION SINGLE POLE, SINGLE THROW SURFACE SWITCH SWITCHBOARD SWITCHGEAR TIMESLOCK TWISTED PAIR TWISTED PAIR SHIELDED TELEPHONE TERMINAL BOARD TYPICAL
ACC ADDOL ADJ ADO AF AFC	ACCESSIBLE ADDITIONAL ADJACENT, ADJOINING AUTOMATIC DOOR OPENER AMPERE FRAME OR AMP FUSE ABOVE FINISHED COUNTER AUTOMATIC FREQUENCY CONTROL, OR AVAILABLE FAULT CURRENT	DRST DRSW DS DWG	DOUBLE POLE, DOUBLE THROW DOUBLE POLE, SINGLE THROW DOOR SWITCH DISCONNECT SWITCH DRAWING	MATV MAX MC MCA MCB MCC MCD MECH MC MH MIN MLO MOUNT MTD MTG MTS MV MVA MW	MASTER ANTENNA TELEVISION SYSTEM MAXIMUM METAL-CLAD MINIMUM CIRCUIT AMPS MINIMUM CIRCUIT BREAKER MOTOR CONTROL CENTER MAIN DISTRIBUTION PANEL MECHANICAL MOTOR GENERATOR MANHOLE MINIMUM MAXIMUM OVERCURRENT PROTECTION MAIN LUGS ONLY MOUNT MOUNTED MOUNTING MANUAL TRANSFER SWITCH MEDIUM VOLTAGE MEGAVOLT-AMPERE MEGAWATT MICROWAVE	ULF UCND ULC LON UPS UTIL	UNDERFLOOR DUCT UNDERGROUND UNDERWRITERS LABORATORY UNLESS OTHERWISE NOTED UNINTERRUPTIBLE POWER SUPPLY UTILITY
AFF AFG AH AHJ AIC ALT AMB OR A AMP ARCH ARCHITECT ASC AT ATS AUTOM AV	ABOVE FINISHED FLOOR ABOVE FINISHED GRADE AMPERE HOUR AUTHORITY HAVING JURISDICTION AMPERE INTERRUPTING CAPACITY ALTERNATE AMBIENT AMP ARCHITECT AMPS SHORT CIRCUIT AMPERE TRIP AUTOMATIC TRANSFER SWITCH ELECTRIC WATER COOLER AUDIO VISUAL	ELEC ELEV EMER EMCP EMI EMT ENCL EPO EPRF ESMT EWC EVH EXIST	ELECTRIC OR ELECTRICAL ELEVATOR EMERGENCY MONITORING CONTROL EMERGENCY ELECTROMAGNETIC INTERFERENCE ELECTRICAL METALLIC TUBING ENCLOSURE EMERGENCY POWER OFF EXOSION PROOF EASMENT ELECTRIC WATER COOLER ELECTRIC WATER HEATER EXISTING	NEUT OR N NFFCA NFPA NIC NIGHT LIGHT NORMALLY OPEN NO SCALE NOT TO SCALE	W WH WP XFER XFMR	V VA VAR VFCU VFD VOLT	VOLT VOLT AMPERE VOLT AMPERE REACTIVE VERTICAL FAN COIL UNIT VARIABLE FREQUENCY DRIVE VOLTAGE
BAT BC BD BFF BIL BLDG BRP BRKR BYP	BATTERY BARE COPPER BOARD BELOW FINISH FLOOR BASIC INSULATION LEVEL BUILDING BOILER PLANT INSTRUMENTATION PANEL BREAKER BY PASS	FA FAAP FABL FABX FACP FC FCU FI FIXT FLT FLUOR FLUOR FIX FI FV FVNR FVR	FIRE ALARM FIRE ALARM ANNUNCIATOR PANEL FIRE ALARM BELL FIRE ALARM BOX FIRE ALARM CONTROL PANEL FOOTCANDLE FAN COIL UNIT FILM ILLUMINATOR FIXTURE FLOODLIGHT FLUORESCENT FLUORESCENT FIXTURE FEET OR FOOT FUSED SWITCH FULL VOLTAGE NON-REVERSING FULL VOLTAGE REVERSING	OC OD OUL	ON CENTER OUTSIDE DIAMETER OVERLOAD	P PA PB PBP PCB PEC PED PEND PENDANT POWER FACTOR PH PHL PNE POD PT PTRV PVC PWR	POLE PUBLIC ADDRESS PANELBOARD, PULL BOX, OR PUSHBUTTON PREFABRICATED BEDSIDE PATIENT UNIT POLYCHLORINATED BIPHENYL PHOTOELECTRIC CELL PEDESTAL PENDANT PENDING POWER FACTOR PHASE PANEL POWER OPERATED DAMPER POTENTIAL TRANSFORMER POWER TYPE ROOF VENTILATION POLYVINYL CHLORIDE (PLASTIC) POWER
C CAB CALC CAP CAT CATV CCR CCTV CD CJ CD CF CFE	CONDUIT CABINET CALCULATE CAPACITY CATALOG COMMUNICATIONS ANTENNA TELEVISION CONTROL CONTACTOR CLOSED CIRCUIT TELEVISION CANDLEA CONSTRUCTION DOCUMENTS CONTRACTOR FURNISHED CONTRACTOR FURNISHED EQUIPMENT	G OR GND GEN GFCI GTB	GROUND GENERATOR GROUND FAULT CIRCUIT INTERRUPTOR GROUND TERMINAL BOX	CC OD OUL	ON CENTER OUTSIDE DIAMETER OVERLOAD	P PA PB PBP PCB PEC PED PEND PENDANT POWER FACTOR PH PHL PNE POD PT PTRV PVC PWR	POLE PUBLIC ADDRESS PANELBOARD, PULL BOX, OR PUSHBUTTON PREFABRICATED BEDSIDE PATIENT UNIT POLYCHLORINATED BIPHENYL PHOTOELECTRIC CELL PEDESTAL PENDANT PENDING POWER FACTOR PHASE PANEL POWER OPERATED DAMPER POTENTIAL TRANSFORMER POWER TYPE ROOF VENTILATION POLYVINYL CHLORIDE (PLASTIC) POWER
CHW CHWP CKT CKT BRKR CLF CLG CMU COMM COMPT CONC CONC CONC CONTR COORD CPI CRI CT CTV CU CU FT CUR	CHILLED WATER CHILLED WATER PUMP CIRCUIT CIRCUIT BREAKER CURRENT LIMITING FUSE CEILING CONCRETE MASONRY UNIT COAX CABLE COMMUNICATION COMPARTMENT CONCRETE CONTINUT CONTRACTOR COORDINATE CONTROL POWER TRANSFORMER CPI CRI CT CTV CU CU FT CUR	HFCU HID HQA HP HRT HZ IESNA IMC INCAND IR IWH J-BOX KV KVA KVH KVAR KW KWH kW-M	HORIZONTAL FAN COIL UNIT HIGH INTENSITY DISCHARGE HAND-OFF-AUTOMATIC HORSEPOWER HERTZ ILLUMINATION ENGINEERING SOCIETY OF NORTH AMERICA INTERMEDIATE METAL CONDUIT INCANDESCENT INFRARED INSTANTANEOUS WATER HEATER JUNCTION BOX KILOVOLT KILOVOLT AMPERE KILOVOLT AMPERE PER HOUR KILOVOLT AMPERE REACTIVE KILOWATT KILOWATT HOUR KILOWATT HOUR METER	RCP REC RECEP RGS RM RMS REQD	REFLECTED CEILING PLAN RECESSED RECEPTACLE RIGID GALVANIZED STEEL ROOM ROOT MEAN SQUARE REQUIRED	S SES SD SF	SHORT CIRCUIT CAPACITY SERVICE ENTRANCE SECTION SMOKE DETECTOR SQUARE FOOT (FEET)

GENERAL NOTES

- ALL ELECTRICAL DEVICES, FIXTURES, EQUIPMENT AND FEEDERS SHALL BE INSTALLED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, THE MANUFACTURER'S RECOMMENDED PROCEDURES, ALL APPLICABLE LOCAL AND STATE CODES, AMERICAN DISABILITIES ACT AND WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE.
- PROVIDE ADDITIONAL SUPPORT FOR DEVICES, FIXTURES, EQUIPMENT AND FEEDERS WHERE THE BUILDING CONSTRUCTION IS NOT SUITABLE FOR DIRECT MOUNTING.
- FIRESTOP, DRAFTSTOP, SMOKESTOP AND/OR PROTECT THE ANNULAR SPACE AROUND ALL PENETRATIONS THROUGH WALLS, PARTITIONS, FLOORS, CEILING, AND ROOFS IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE, UL LISTING REQUIREMENT AND THE APPLICABLE BUILDING CODES.
- VERIFY CEILING SYSTEMS AND PROVIDE MOUNTING ACCESSORIES, TRIMS AND ALL REQUIRED MOUNTING HARDWARE TO SUIT THE PARTICULAR INSTALLATION.
- PROTECT EXISTING UNDERGROUND AND BUILDING INTERIOR UTILITIES DURING CONSTRUCTION.
- BRANCH CIRCUIT CONDUCTORS SHALL BE 12 AWG COPPER MINIMUM.
- COORDINATE ANY AND ALL WORK WITH ALL OTHER TRADES PRIOR TO INSTALLATION SO AS TO AVOID CONFLICT DURING ONSTRUCTION.
- ALL PANELS SHALL HAVE TYPED, COMPLETED DIRECTORIES INDICATING EQUIPMENT SERVED AND ROOM NUMBER (AS INDICATED ON FINAL BUILDING ROOM SIGNAGE) OF EQUIPMENT LOCATION, OR SPARE, OR SPACE.
- MANUFACTURER'S NAME AND MODEL NUMBER ARE GIVEN FOR DESCRIPTIVE PURPOSES, TO INDICATE A QUALITY STANDARD AND ARE NOT INTENDED TO LIMIT PRODUCTS TO A PARTICULAR MANUFACTURER, PRODUCTS DEEMED EQUAL AND APPROVED BY THE DESIGNER WILL BE ACCEPTED. ALL PRODUCTS MUST COMPLY WITH "BUY AMERICAN ACT".
- ALL FEEDERS AND CIRCUITRY SHALL BE TORQUED PER THE PANEL, BREAKER, AND/OR PARTICULAR EQUIPMENT MANUFACTURER'S SPECIFICATIONS.
- CIRCUITRY TO SWITCHES, RECEPTACLES, AND ALL OTHER DEVICES SHALL BE TERMINATED ON THE DEVICE'S SCREW TERMINALS.
- MOUNTING HEIGHTS INDICATED ARE TO CENTER OF DEVICE, OUTLET, FIXTURE, OR EQUIPMENT UNLESS NOTED OTHERWISE.
- ALL WIRE TERMINATIONS SHALL BE RATED FOR 75 DEGREE C.
- ALL CONDUCTORS SHALL HAVE THHN/THWN INSULATION, UNLESS OTHERWISE NOTED.
- ALL CONDUIT SHALL BE RGS, EMT, OR LFMC UNLESS OTHERWISE NOTED. FMC CONDUIT MAY BE USED ON VIBRATING EQUIPMENT.
- ALL ELECTRICAL MATERIALS, DEVICES, APPLIANCES AND EQUIPMENT SHALL BE LABEL LISTED BY AN APPROVED THIRD PARTY TESTING AGENCY.
- UNDERGROUND CONDUIT SHALL BE BURIED PER TABLE 300.5 OF THE 2011 NEC.

BUILDING CODE DATA

ELECTRICAL SYSTEM AND EQUIPMENT		ENERGY COST BUDGET	
METHOD OF COMPLIANCE: <input type="checkbox"/> PRESCRIPTIVE		<input type="checkbox"/> PERFORMANCE	
LIGHTING SCHEDULE			
LAMP TYPE REQUIRED IN FIXTURE:		REFER TO LIGHT FIXTURE SCHEDULE	
NUMBER OF LAMPS IN FIXTURE:		REFER TO LIGHT FIXTURE SCHEDULE	
BALLAST TYPE USED IN THE FIXTURE:		REFER TO LIGHT FIXTURE SCHEDULE	
NUMBER OF BALLASTS IN FIXTURE:		REFER TO LIGHT FIXTURE SCHEDULE	
TOTAL INTERIOR WATTAGE PER FIXTURE:		TOTAL INTERIOR WATTAGE SPECIFIED VS. ALLOWED: 28,920 W SPECIFIED VS. 29,782 W ALLOWED	
TOTAL EXTERIOR WATTAGE SPECIFIED VS. ALLOWED:		858 W SPECIFIED VS. 1,352 W ALLOWED	
EQUIPMENT SCHEDULES WITH MOTORS (NOT USED FOR MECHANICAL SYSTEMS)			
MOTOR HORSEPOWER: N/A		N/A	
NUMBER OF PHASES:		N/A	
MINIMUM EFFICIENCY:		N/A	
MOTOR TYPE:		N/A	
NUMBER OF POLES:		N/A	
DESIGNER STATEMENT:			
TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING COMPLIES WITH THE ELECTRICAL SYSTEM AND EQUIPMENT REQUIREMENTS OF ANSI/ASHRAE/IESNA STANDARD 90.1-2007.			
NAME: _____		CHARLES G. SOWDERS III	
TITLE: _____		PROFESSIONAL ENGINEER	

LIGHT FIXTURE SCHEDULE							
SYMBOL	LABEL	# OF LAMPS	TYPE OF LAMP	BALLAST	WATTS/ FIXTURE	VOLTAGE	DESCRIPTION
	A2	2	28W T5 3500K	1 PROGRAM START 1.0 BF	64	277	2' X 4' RECESSED DIRECT/INDIRECT FLUORESCENT
	A2D	2	28W T5 3500K	1 RAPID START DIMMING 1.0 BF	64	277	2' X 4' RECESSED DIRECT/INDIRECT FLUORESCENT WITH DIMMING BALLAST
	A3	3	28W T5 3500K	2 PROGRAM START 1.0 BF	95	277	2' X 4' RECESSED DIRECT/INDIRECT FLUORESCENT
	B2	2	14W T5 3500K	1 PROGRAM START 1.0 BF	32	277	2' X 2' RECESSED DIRECT/INDIRECT FLUORESCENT
	B2D	2	14W T5 3500K	1 RAPID START DIMMING 1.0 BF	32	277	2' X 2' RECESSED DIRECT/INDIRECT FLUORESCENT WITH DIMMING BALLAST
	B3	3	14W T5 3500K	1 PROGRAM START 1.0 BF	50	277	2' X 2' RECESSED DIRECT/INDIRECT FLUORESCENT
	C2	2	28W T5 3500K	1 PROGRAM START 1.0 BF	64	277	2' X 4' RECESSED PRISMATIC LENSED TROFFER FLUORESCENT
	C3	3	28W T5 3500K	2 PROGRAM START 1.0 BF	95	277	2' X 4' RECESSED PRISMATIC LENSED TROFFER FLUORESCENT
	D4	4	28W T5 3500K	2 PROGRAM START 1.0 BF	126	277	2' X 4' RECESSED DIRECT/INDIRECT FLUORESCENT WITH SIDE MOUNT DIFFUSERS
	E	2	28W T5 3500K	1 PROGRAM START	62	277	4' FLUORESCENT STRIP LIGHT
	EMR	LED	LED	---	1	277	EXTERIOR EMERGENCY EGRESS LIGHT FIXTURE SUITABLE FOR WET AND COLD LOCATIONS
	EXA	LED	LED	---	1	277	SINGLE-FACE LED EMERGENCY EXIT SIGN WITH DIRECTIONAL INDICATOR
	EXB	LED	LED	---	1	277	DOUBLE FACE LED EMERGENCY EXIT SIGN WITH DIRECTIONAL INDICATOR
	F	1	26W TRT 3500K	1 PROGRAM START	29	277	6" OPEN RECESSED HORIZONTAL COMPACT FLUORESCENT DOWNLIGHT
	G	1	42W TRT 3500K	1 PROGRAM START	46	277	8" LENSED RECESSED HORIZONTAL COMPACT FLUORESCENT DOWNLIGHT SUITABLE FOR WET LOCATIONS
	H	1	28W T5 3500K	1 PROGRAM START COLD WEATHER	32	277	EXTERIOR 4" ROUGH SURFACE MOUNT LINEAR FLUORESCENT WITH COLD WEATHER BALLAST, SUITABLE FOR WET LOCATIONS
	I	1	50W PSMH 3500K	1 PULSE START	67	277	EXTERIOR PULSE START METAL HALIDE BOLLARD LIGHT FIXTURE
	J	1	150W PSMH 3500K	1	166	277	16" PENDENT MOUNTED POOL LIGHT FIXTURE WITH GLASS LENS SUITABLE FOR NATATORIUM
	K2	2	14W T5 3500K	1 PROGRAM START 1.0 BF	32	277	2" LINEAR FLUORESCENT WALL BRACKET
	K4	2	28W T5 3500K	1 PROGRAM START 1.0 BF	64	277	4" LINEAR FLUORESCENT WALL BRACKET
N/A	L	1 OR 2	T5 3500K	1 INSTANT START	8 W/FT	120	LINEAR FLUORESCENT UNDERCABINET LIGHT. COORDINATE LENGTHS AND MOUNTING WITH CABINETRY AND ARCHITECTURAL DRAWINGS.
N/A	M	LED	LED 3500K	1 LED DRIVER	8 W/FT	120	LINEAR LED SOFFIT LIGHT. COORDINATE LENGTHS AND MOUNTING WITH ARCHITECTURAL DRAWINGS.
	N	LED	LED 3500K	1 LED DRIVER	26	277	EXTERIOR LED WALL PACK

NOTES:  
1. EM - EMERGENCY LIGHT (CIRCUITED FROM NORMAL AND EMERGENCY BACK-UP POWER).  
EM NL - UN-SWITCHED NIGHT LIGHT (CIRCUITED FROM EMERGENCY POWER).  
3. ALL FLUORESCENT LIGHT FIXTURES MUST HAVE INDIVIDUAL DISCONNECTING MEANS LOCATED AT EACH FIXTURE.  
4. ALL LIGHTING SHALL BE DAYLIGHT COLOR SPECTRUM.  
5. VERIFY ALL LIGHT FIXTURE MOUNTING TYPES AND COLORS WITH ARCHITECT.

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ISSUED FOR BID

CONSULTANTS:										PROJECT MANAGER:			Project Number 3627	Scale As indicated	Drawing Title ELECTRICAL NOTES, ABBREVIATIONS, LEGENDS AND LIGHT FIXTURE SCHEDULE			Project Title RENOVATE BUILDING 69		VA Project Number 542-CSI-203		Office of Facilities Management	
Project Manager BRAY MOONEY CONSULTING		Architect ARRAY HEALTHCARE FACILITIES SOLUTIONS		Structural Engineer WZG, STRUCTURAL CONSULTING ENGINEERS		ME/PE Engineer APOGEE CONSULTING GROUP		Civil Engineer GUIDON DESIGN		Fire Protection Consultant HARRINGTON GROUP		Cost Estimator BRAY MOONEY CONSULTING		Acoustic Consultant ATLANTIC AQUATIC ENGINEERING		Approved: Project Director		Location 1400 Black Horse Hill, Coatesville, PA		Drawing Number E-001			
410 E. 21 STREET CHESTER, PA 19013 Tel (610) 872-3716		2530 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA 19406 Tel (610) 270-0599		180 W. RIDGE PIKE LIMERICK, PA 19468 Tel (214) 329-9559		7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC 27606 Tel (919) 859-7420		2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel (317) 800-6386		7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC 28277 Tel (704) 531-9377		410 E. 21 STREET CHESTER, PA 19013 Tel (610) 872-3716		1823 DEEP RUN ROAD PIPERVILLE, PA 18947 Tel (215) 766-0409						Dwg. 69 of 86			
Revisions		Date														Date 3/29/13		Checked CGS/WCM		Drawn KLC			



three inches = one foot  
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one inch = one foot  
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one half inch = one foot  
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one quarter inch = one foot  
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- KEY

1

EXISTING PANEL '69H' SHALL BE RELOCATED TO MECHANICAL AREA 1-606. SEE 1/E-102 FOR NEW LOCATION.

2

EXISTING KILNS TO BE RELOCATED. RECONNECT AS SHOWN ON E-102.

3

EXISTING PANEL '69F' TO REMAIN. SEE NOTES E-102.

4

ELECTRICAL WIREMOLD OR WIRE TROUGH TO BE DEMOLISHED.

5

AUTOMATIC DOOR OPENER TO BE DEMOLISHED.

6

EXISTING EQUIPMENT IN ROOM TO REMAIN.

7

PANIC ALARM TO DEMOLISHED AND TURNED OVER TO THE OWNER.

8

ADA AUTOMATIC DOOR HARDWARE TO BE DEMOLISHED.

9

DEMOLISH EXISTING SECURITY CANERA. TO BE RELOCATED.

10

DEMOLISH EXISTING AIR COMPRESSOR ELECTRICAL CONNECTION AT EXISTING LOADING DOCK.
- NOTE

1. DEMOLISH ALL ELECTRICAL CONDUCTORS AND CONDUIT BACK TO PANELBOARD FOR ALL DEVICES. MARK EXISTING UNUSED OVERCURRENT PROTECTION DEVICES AS "SPARE". REVISE PANEL SCHEDULES TO REFLECT NEW WIRING.

2. CONTRACTOR SHALL REUSE EXISTING FIRE ALARM DEVICES IF NOT DAMAGED DURING DEMOLITION.

3. CONTRACTOR SHALL NOT LEAVE ANY UNUSED ELECTRICAL DEVICES ABANDONED IN PLACE. ALL ELECTRICAL DEVICES MUST BE REMOVED.

4. EXISTING EQUIPMENT, SUCH AS LIGHTING FIXTURES, WIRING DEVICES, CONDUITS, ETC., TO BE REMOVED COMPLETELY. CUT/CAP CONDUITS AT THE AREA OF WORK PERIMETER AND REMOVE CONDUIT WITHIN THE WORK AREA. DISCONNECT WIRING AT THE OVERCURRENT PROTECTIVE DEVICE AND REMOVE WIRING COMPLETELY FROM THE ABANDONED CONDUITS.

5. REMOVE ALL ACCESSIBLE ABANDONED WIRING OF ALL TYPES, OR CAP AND LABEL IN JUNCTION BOX FOR RE-USE, IN COMPLIANCE WITH THE NATIONAL ELECTRIC CODE.

6. MAINTAIN AND RESTORE ANY EXISTING SYSTEMS THAT WILL REMAIN IN USE DURING DEMOLITION OR CONSTRUCTION. IF INTERRUPTED, ALL CONDUITS AND CONDUCTORS PASSING THROUGH RENOVATED AREAS AND SERVICING UNDISTURBED AREAS.

7. CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION. DEVICES SHOWN ARE NOT ALL INCLUSIVE. CONTRACTOR SHALL VERIFY IN FIELD EXTENT OF ALL DEMOLITION.
- 1ST FLOOR ELECTRICAL DEMOLITION PLAN NOTES:

1. DEMOLISH ALL ELECTRICAL CONDUCTORS AND CONDUIT BACK TO PANELBOARD FOR ALL DEVICES. MARK EXISTING UNUSED OVERCURRENT PROTECTION DEVICES AS "SPARE". REVISE PANEL SCHEDULES TO REFLECT NEW WIRING.

2. CONTRACTOR SHALL REUSE EXISTING FIRE ALARM DEVICES IF NOT DAMAGED DURING DEMOLITION.

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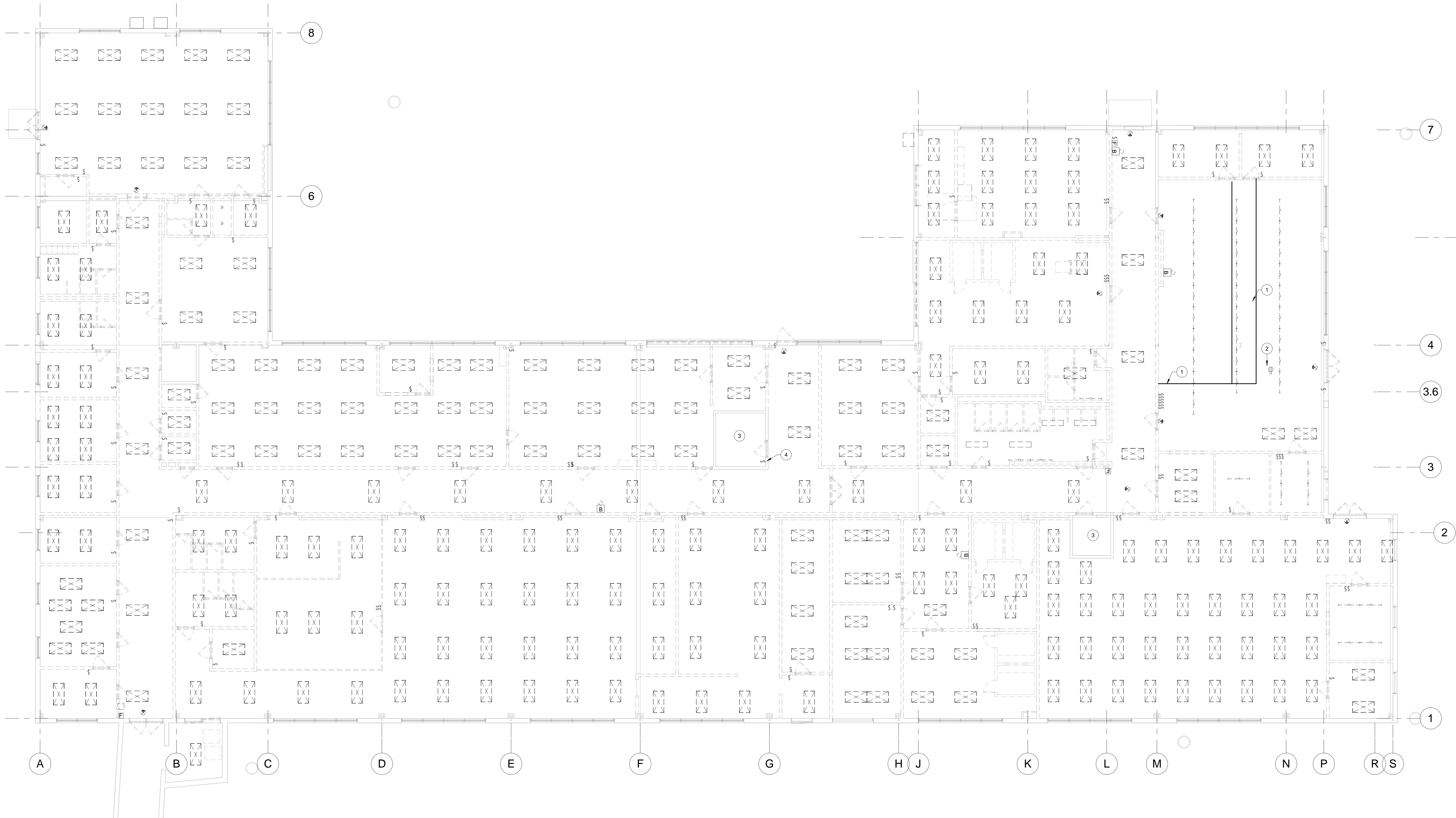
1 1ST FLOOR ELECTRICAL DEMOLITION PLAN  
1/8" = 1'-0"

FULLY SPRINKLERED  
ISSUED FOR BID

CONSULTANTS:										PROJECT MANAGER:		Project Number	3627	Scale	1/8" = 1'-0"	Drawing Title		1ST FLOOR ELECTRICAL DEMOLITION PLAN		Project Title		RENOVATE BUILDING 69		VA Project Number		542-CSI-203		Office of Facilities Management	
Project Manager		Architect	Structural Engineer	MEP/FP Engineer	Civil Engineer	Fire Protection Consultant	Cost Estimator	Aquatic Consultant		<div>Bray Mooney Consulting</div>		Approved: Project Director		Location		Date		Checked	Drawn	Building Number		69							
BRAY MOONEY CONSULTING		ARRAY HEALTHCARE FACILITIES SOLUTIONS	WZG, STRUCTURAL CONSULTING ENGINEERS	APOGEE CONSULTING GROUP	GUIDON DESIGN	HARRINGTON GROUP	BRAY MOONEY CONSULTING	ATLANTIC AQUATIC ENGINEERING						1400 Black Horse Hill, Coatesville, PA		3/29/13		CGS/WCM	KLC	Drawing Number		ED101							
410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716		2530 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA 19406 Tel: (610) 270-0599	180 W. RIDGE PIKE LIMERICK, PA 19468 Tel: (214) 329-5559	7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC 27606 Tel: (919) 859-7420	2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 800-6386	7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC 28277 Tel: (704) 531-9777	410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716	1823 DEEP RUN ROAD PIPERSVILLE, PA 18947 Tel: (215) 766-0409						Dwg. 70 of 86				Department of Veterans Affairs											
Revisions		Date																											



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KEY	NOTE
1	EXISTING CEILING MOUNTED TROUGH TO BE DEMOLISHED.
2	EXISTING CEILING MOUNTED RECEPTACLE TO BE DEMOLISHED.
3	EXISTING LIGHTING TO REMAIN.
4	EXISTING LIGHT SWITCH TO BE RELOCATED TO COORDINATE WITH NEW DOOR SWING. TIE TO EXISTING LIGHT FIXURES AND CIRCUIT.

- 1ST FLOOR LIGHTING DEMOLITION PLAN NOTES:
- DEMOLISH ALL ELECTRICAL CONDUCTORS AND CONDUIT BACK TO PANELBOARD FOR ALL DEVICES SHOWN ON THIS PLAN. MARK EXISTING UNUSED OVERCURRENT PROTECTION DEVICES AS "SPARE".
  - CONTRACTOR SHALL REUSE EXISTING FIRE ALARM DEVICES IF NOT DAMAGED DURING DEMOLITION.
  - CONTRACTOR SHALL NOT LEAVE ANY UNUSED ELECTRICAL DEVICES ABANDONED IN PLACE. ALL ELECTRICAL DEVICES MUST BE REMOVED.
  - EXISTING EQUIPMENT, SUCH AS LIGHTING FIXTURES, WIRING DEVICES, CONDUITS, ETC., SHOWN ON PLANS TO BE REMOVED COMPLETELY. CUT/CAP CONDUITS AT THE AREA OF WORK PERIMETER AND REMOVE CONDUIT WITHIN THE WORK AREA, DISCONNECT WIRING AT THE OVERCURRENT PROTECTIVE DEVICE AND REMOVE WIRING COMPLETELY FROM THE ABANDONED CONDUITS.
  - REMOVE ALL ACCESSIBLE ABANDONED WIRING OF ALL TYPES, OR CAP AND LABEL IN JUNCTION BOX FOR RE-USE, IN COMPLIANCE WITH THE NATIONAL ELECTRIC CODE.
  - MAINTAIN AND RESTORE ANY EXISTING SYSTEMS THAT WILL REMAIN IN USE DURING DEMOLITION OR CONSTRUCTION, IF INTERRUPTED. ALL CONDUITS AND CONDUCTORS PASSING THROUGH RENOVATED AREAS AND SERVING UNDISTURBED AREAS.

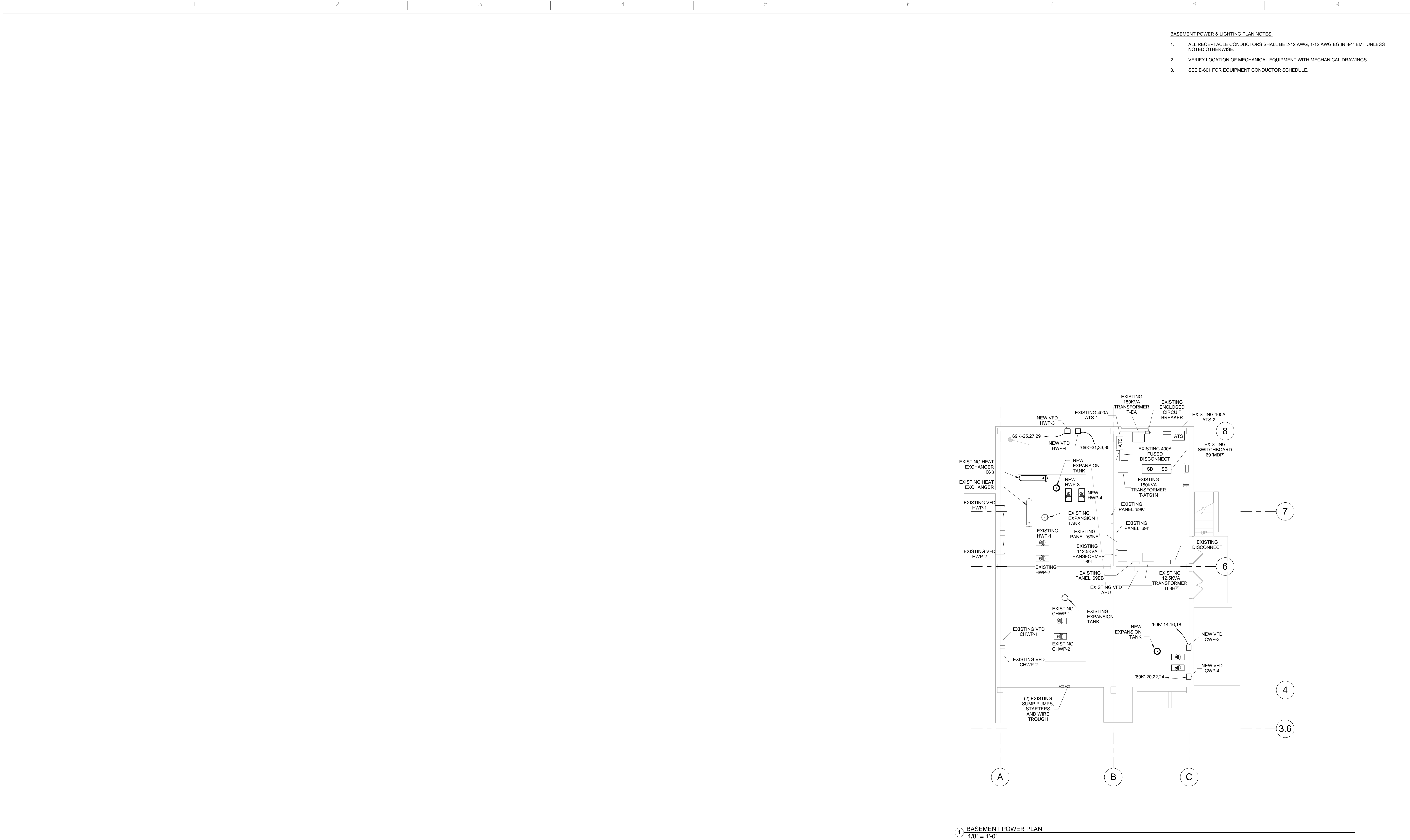
1 1ST FLOOR LIGHTING & FIRE ALARM DEMOLITION PLAN  
1/8" = 1'-0"

FULLY SPRINKLERED  
ISSUED FOR BID

<b>CONSULTANTS:</b>										<b>PROJECT MANAGER:</b>		Project Number 3627	Scale 1/8" = 1'-0"	Drawing Title 1ST FLOOR LIGHTING DEMOLITION PLAN	Project Title RENOVATE BUILDING 69	VA Project Number 542-CSI-203	Office of Facilities Management
<u>Project Manager</u> BRAY MOONEY CONSULTING  410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716	<u>Architect</u> ARRAY HEALTHCARE FACILITIES SOLUTIONS  2530 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA 19406 Tel: (610) 270-0599	<u>Structural Engineer</u> WZG, STRUCTURAL CONSULTING ENGINEERS  180 W. RIDGE PIKE LIMERICK, PA 19468 Tel: (214) 329-5559	<u>MEP/FP Engineer</u> APOGEE CONSULTING GROUP  7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC 27606 Tel: (919) 859-7420	<u>Civil Engineer</u> GUIDON DESIGN  2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 800-6386	<u>Fire Protection Consultant</u> HARRINGTON GROUP  7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC 28277 Tel: (704) 531-9077	<u>Cost Estimator</u> BRAY MOONEY CONSULTING  410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716	<u>Aquatic Consultant</u> ATLANTIC AQUATIC ENGINEERING  1823 DEEP RUN ROAD PIPERSVILLE, PA 18947 Tel: (215) 766-0409	Approved: Project Director		Location 1400 Black Horse Hill, Coatesville, PA		Drawing Number ED102					
Revisions		Date								Date 3/29/13		Checked CGS/WCM	Drawn KLC	Dwg. 71 of 86			
																 Department of Veterans Affairs	



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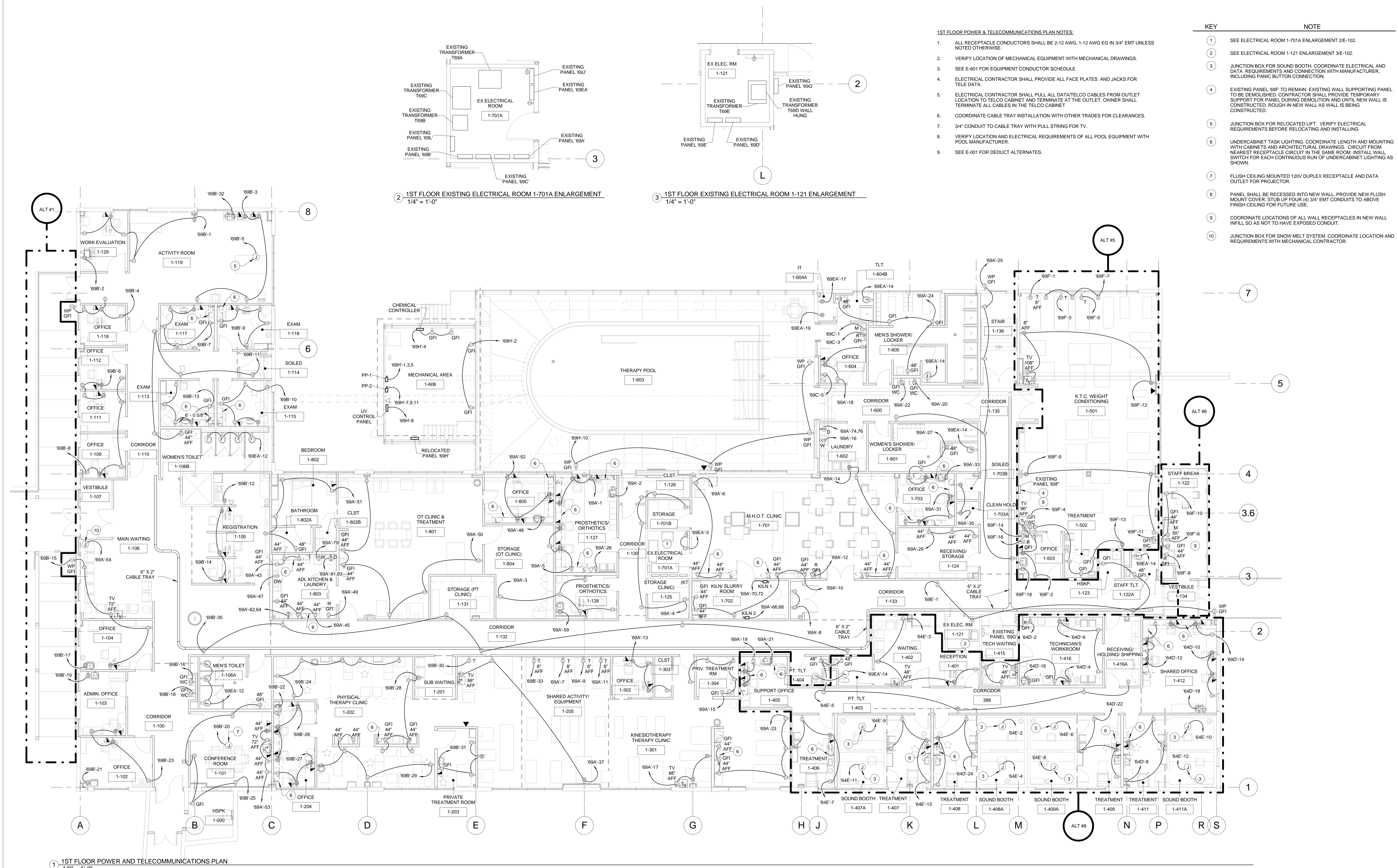


1 BASEMENT POWER PLAN  
1/8" = 1'-0"

<div>CONSULTANTS:</div> <table><tr><td><div>Project Manager</div><div>BRAY MOONEY CONSULTING</div><div>410 E. 21 STREET CHESTER, PA, 19013 Tel: (610) 872-3716</div></td><td><div>Architect</div><div>ARRAY HEALTHCARE FACILITIES SOLUTIONS</div><div>2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA, 19406 Tel: (610) 972-3716</div></td><td><div>Structural Engineer</div><div>WZG, STRUCTURAL CONSULTING ENGINEERS</div><div>180 W. RIDGE PIKE LIMERICK, PA, 19468 Tel: (214) 329-5559</div></td><td><div>MEP/FP Engineer</div><div>APOGEE CONSULTING GROUP</div><div>7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC, 27606 Tel: (919) 859-7420</div></td><td><div>Civil Engineer</div><div>GUIDON DESIGN</div><div>2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 800-6386</div></td><td><div>Fire Protection Consultant</div><div>HARRINGTON GROUP</div><div>7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC, 28277 Tel: (704) 531-9777</div></td><td><div>Cost Estimator</div><div>BRAY MOONEY CONSULTING</div><div>410 E. 21 STREET CHESTER, PA, 19013 Tel: (610) 872-3716</div></td><td><div>Aquatic Consultant</div><div>ATLANTIC AQUATIC ENGINEERING</div><div>1823 DEEP RUN ROAD PIPERSVILLE, PA, 18947 Tel: (215) 766-0409</div></td></tr></table>										<div>Project Manager</div> <div>BRAY MOONEY CONSULTING</div> <div>410 E. 21 STREET CHESTER, PA, 19013 Tel: (610) 872-3716</div>	<div>Architect</div> <div>ARRAY HEALTHCARE FACILITIES SOLUTIONS</div> <div>2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA, 19406 Tel: (610) 972-3716</div>	<div>Structural Engineer</div> <div>WZG, STRUCTURAL CONSULTING ENGINEERS</div> <div>180 W. RIDGE PIKE LIMERICK, PA, 19468 Tel: (214) 329-5559</div>	<div>MEP/FP Engineer</div> <div>APOGEE CONSULTING GROUP</div> <div>7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC, 27606 Tel: (919) 859-7420</div>	<div>Civil Engineer</div> <div>GUIDON DESIGN</div> <div>2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 800-6386</div>	<div>Fire Protection Consultant</div> <div>HARRINGTON GROUP</div> <div>7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC, 28277 Tel: (704) 531-9777</div>	<div>Cost Estimator</div> <div>BRAY MOONEY CONSULTING</div> <div>410 E. 21 STREET CHESTER, PA, 19013 Tel: (610) 872-3716</div>	<div>Aquatic Consultant</div> <div>ATLANTIC AQUATIC ENGINEERING</div> <div>1823 DEEP RUN ROAD PIPERSVILLE, PA, 18947 Tel: (215) 766-0409</div>	<div>PROJECT MANAGER:</div> <div>Bray Mooney Consulting</div>		<div>Project Number</div> <div>3627</div>	<div>Scale</div> <div>1/8" = 1'-0"</div>	<div>Drawing Title</div> <div>BASEMENT POWER PLAN</div>		<div>Project Title</div> <div>RENOVATE BUILDING 69</div>		<div>VA Project Number</div> <div>542-CSI-203</div>	<div>Office of Facilities Management</div> <div>Department of Veterans Affairs</div>
<div>Project Manager</div> <div>BRAY MOONEY CONSULTING</div> <div>410 E. 21 STREET CHESTER, PA, 19013 Tel: (610) 872-3716</div>	<div>Architect</div> <div>ARRAY HEALTHCARE FACILITIES SOLUTIONS</div> <div>2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA, 19406 Tel: (610) 972-3716</div>	<div>Structural Engineer</div> <div>WZG, STRUCTURAL CONSULTING ENGINEERS</div> <div>180 W. RIDGE PIKE LIMERICK, PA, 19468 Tel: (214) 329-5559</div>	<div>MEP/FP Engineer</div> <div>APOGEE CONSULTING GROUP</div> <div>7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC, 27606 Tel: (919) 859-7420</div>	<div>Civil Engineer</div> <div>GUIDON DESIGN</div> <div>2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 800-6386</div>	<div>Fire Protection Consultant</div> <div>HARRINGTON GROUP</div> <div>7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC, 28277 Tel: (704) 531-9777</div>	<div>Cost Estimator</div> <div>BRAY MOONEY CONSULTING</div> <div>410 E. 21 STREET CHESTER, PA, 19013 Tel: (610) 872-3716</div>	<div>Aquatic Consultant</div> <div>ATLANTIC AQUATIC ENGINEERING</div> <div>1823 DEEP RUN ROAD PIPERSVILLE, PA, 18947 Tel: (215) 766-0409</div>																				
<div>Approved: Project Director</div>		<div>Location</div> <div>1400 Black Horse Hill, Coatesville, PA</div>		<div>Location</div> <div>1400 Black Horse Hill, Coatesville, PA</div>		<div>Building Number</div> <div>69</div>	<div>Drawing Number</div> <div>E-101</div>																				
<div>Date</div> <div>3/29/13</div>		<div>Checked</div> <div>CGS/WCM</div>	<div>Drawn</div> <div>KLC</div>	<div>Dwg. 72 of 86</div>																							



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- 1ST FLOOR POWER & TELECOMMUNICATIONS PLAN NOTES:
- ALL RECEPTACLE CONDUCTORS SHALL BE 2-12 AWG, 1-12 AWG EG IN 3/4" EMT UNLESS NOTED OTHERWISE.
  - VERIFY LOCATION OF MECHANICAL EQUIPMENT WITH MECHANICAL DRAWINGS.
  - SEE E-601 FOR EQUIPMENT CONDUCTOR SCHEDULE.
  - ELECTRICAL CONTRACTOR SHALL PROVIDE ALL FACE PLATES AND JACKS FOR TELE DATA.
  - ELECTRICAL CONTRACTOR SHALL PULL ALL DATA/TELCO CABLES FROM OUTLET LOCATION TO TELCO CABINET AND TERMINATE AT THE OUTLET. OWNER SHALL TERMINATE ALL CABLES IN THE TELCO CABINET.
  - COORDINATE CABLE TRAY INSTALLATION WITH OTHER TRADES FOR CLEARANCES.
  - 3/4" CONDUIT TO CABLE TRAY WITH PULL STRING FOR TV.
  - VERIFY LOCATION AND ELECTRICAL REQUIREMENTS OF ALL POOL EQUIPMENT WITH POOL MANUFACTURER.
  - SEE E-001 FOR DEDUCT ALTERNATES.

- | KEY | NOTE  |
|-----|---|
| 1   | SEE ELECTRICAL ROOM 1-701A ENLARGEMENT 2/E-102.   |
| 2   | SEE ELECTRICAL ROOM 1-121 ENLARGEMENT 3/E-102.  |
| 3   | JUNCTION BOX FOR SOUND BOOTH. COORDINATE ELECTRICAL AND DATA REQUIREMENTS AND CONNECTION WITH MANUFACTURER, INCLUDING PANIC BUTTON CONNECTION.  |
| 4   | EXISTING PANEL 69F TO REMAIN. EXISTING WALL SUPPORTING PANEL TO BE DEMOLISHED. CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT FOR PANEL DURING DEMOLITION AND UNTIL NEW WALL IS CONSTRUCTED. ROUGH IN NEW WALL AS WALL IS BEING CONSTRUCTED.      |
| 5   | JUNCTION BOX FOR RELOCATED LIFT. VERIFY ELECTRICAL REQUIREMENTS BEFORE RELOCATING AND INSTALLING.   |
| 6   | UNDERCABINET TASK LIGHTING. COORDINATE LENGTH AND MOUNTING WITH CABINETS AND ARCHITECTURAL DRAWINGS. CIRCUIT FROM NEAREST RECEPTACLE CIRCUIT IN THE SAME ROOM. INSTALL WALL SWITCH FOR EACH CONTINUOUS RUN OF UNDERCABINET LIGHTING AS SHOWN. |
| 7   | FLUSH CEILING MOUNTED 120V DUPLEX RECEPTACLE AND DATA OUTLET FOR PROJECTOR.   |
| 8   | PANEL SHALL BE RECESSED INTO NEW WALL. PROVIDE NEW FLUSH MOUNT COVER. STUB UP FOUR (4) 3/4" EMT CONDUITS TO ABOVE FINISH CEILING FOR FUTURE USE.  |
| 9   | COORDINATE LOCATIONS OF ALL WALL RECEPTACLES IN NEW WALL INFILL SO AS NOT TO HAVE EXPOSED CONDUIT.  |
| 10  | JUNCTION BOX FOR SNOW MELT SYSTEM. COORDINATE LOCATION AND REQUIREMENTS WITH MECHANICAL CONTRACTOR.   |

1 1ST FLOOR POWER AND TELECOMMUNICATIONS PLAN  
1/8" = 1'-0"

FULLY SPRINKLERED  
ISSUED FOR BID

CONSULTANTS:										PROJECT MANAGER:		Project Number	3627	Scale	As indicated	Drawing Title	1ST FLOOR POWER AND TELECOMMUNICATIONS PLAN			Project Title	RENOVATE BUILDING 69			VA Project Number	542-CSI-203		Office of Facilities Management
Project Manager		Architect	Structural Engineer	MEP/FP Engineer	Civil Engineer	Fire Protection Consultant	Cost Estimator	Aquatic Consultant	<div>Bray Mooney Consulting</div>		Approved: Project Director		Location		Date		Checked	Drawn	Drawing Number								
BRAY MOONEY CONSULTING		ARRAY HEALTHCARE FACILITIES SOLUTIONS	WZG, STRUCTURAL ENGINEERS	APOGEE CONSULTING GROUP	GUIDON DESIGN	HARRINGTON GROUP	BRAY MOONEY CONSULTING	ATLANTIC AQUATIC ENGINEERING																			
410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716		2530 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA 19406 Tel: (610) 270-0599	190 W. RIDGE PIKE LIMERICK, PA 19449 Tel: (214) 329-5559	7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC 27606 Tel: (919) 659-7420	2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 800-6386	7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC 28277 Tel: (704) 531-9077	410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716	1823 DEEP RUN ROAD PIPERSVILLE, PA 18647 Tel: (215) 766-0409																			
Revisions		Date																		E-102		Dwg. 73	of 86				







three inches = one foot  
one and one half inches = one foot  
one inch = one foot  
three quarters inch = one foot  
one half inch = one foot  
three eighths inch = one foot  
one quarter inch = one foot  
one eighth inch = one foot

- KEY

1

LIGHTING FOR SOUND BOOTHS INTEGRAL TO SOUND BOOTH EQUIPMENT. COORDINATE WITH MANUFACTURER.

2

IF ALTERNATE #1 OR #7 IS NOT ACCEPTED CONTRACTOR SHALL INSTALL EXTERIOR WALL PACKS AS SHOWN.

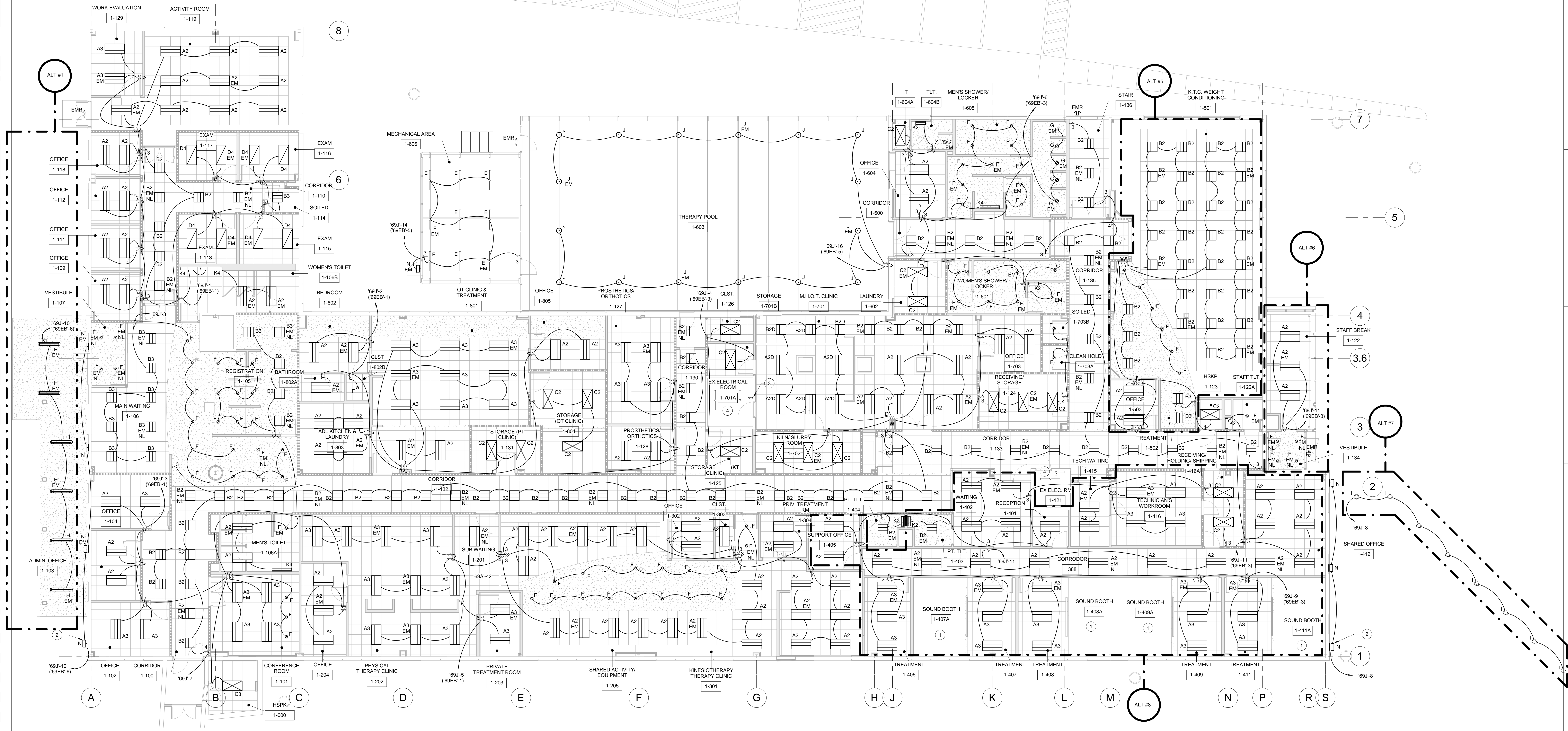
3

RELOCATE LIGHT SWITCH TO COORDINATE WITH NEW DOOR SWING. TIE TO EXISTING LIGHT FIXTURES AND CIRCUIT.

4


EXISTING LIGHTING TO REMAIN.
- NOTE

1ST FLOOR LIGHTING PLAN NOTES:  
1. ALL LIGHTING CONDUCTORS SHALL BE 2-12 AWG, 1-12 AWG EG IN 3/4" EMT UNLESS NOTED OTHERWISE.  
2. ALL EMERGENCY NIGHTLIGHTS (EM NL), EXIT SIGNS AND EXTERIOR EMERGENCY EGRESS LIGHTING SHALL BE CIRCUITED FROM EMERGENCY LIGHTING CIRCUIT 88EB-2, AHEAD OF ANY SWITCHING.  
3. ALL EMERGENCY LIGHTS (EM) SHALL HAVE BOTH NORMAL AND EMERGENCY POWER. SEE DETAIL 3/E-501.  
69J-## - NORMAL POWER CIRCUIT  
69EB-## - EMERGENCY POWER CIRCUIT  
4. SEE 1/E-102 FOR UNDERCABINET LIGHTING LOCATIONS. COORDINATE ALL LENGTHS AND MOUNTING WITH CABINETS AND ARCHITECTURAL DRAWINGS.  
5. ALL EXTERIOR LIGHTING SHALL BE CONTROLLED BY PHOTOCELL.  
6. ALL EXISTING EXTERIOR LIGHTING AND CONTROLS TO REMAIN.  
7. ALL EXTERIOR EMERGENCY LIGHTS (EM) SHALL HAVE BOTH NORMAL AND EMERGENCY POWER. SEE DETAIL 3/E-501.  
69J-## - NORMAL POWER CIRCUIT  
69EB-## - EMERGENCY POWER CIRCUIT  
8. SEE E-001 FOR DEDUCT ALTERNATES.



1 1ST FLOOR LIGHTING PLAN  
1/8" = 1'-0"

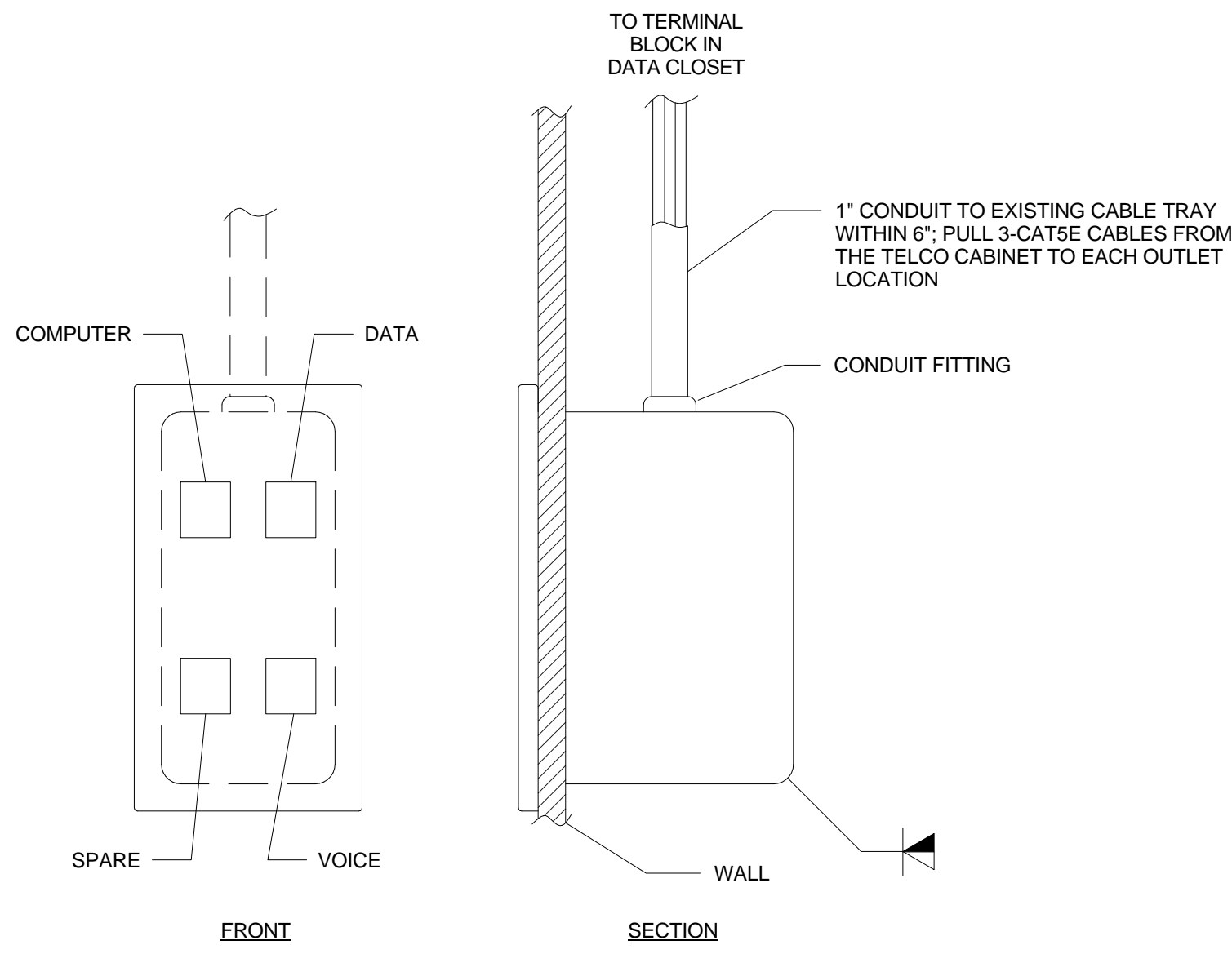
FULLY SPRINKLERED  
ISSUED FOR BID

CONSULTANTS:										PROJECT MANAGER:		Project Number	3627	Scale	1/8" = 1'-0"	Drawing Title		1ST FLOOR LIGHTING PLAN		Project Title		RENOVATE BUILDING 69		VA Project Number		542-CSI-203		Office of Facilities Management	
Project Manager		Architect	Structural Engineer	MEP/FP Engineer	Civil Engineer	Fire Protection Consultant	Cost Estimator	Aquatic Consultant		Approved: Project Director		Location		Date		Checked	Drawn	Drawing Number		E-104		Dwg. 75 of 86							
BRAY MOONEY CONSULTING		WZG, STRUCTURAL FACILITIES SOLUTIONS	STRUCTURAL CONSULTING ENGINEERS	APOGEE CONSULTING GROUP	GUIDON DESIGN	HARRINGTON GROUP	BRAY MOONEY CONSULTING	ATLANTIC AQUATIC ENGINEERING				1400 Black Horse Hill, Coatesville, PA		3/29/13		CGS/WCM	KLC												
410 E. 21 STREET CHESTER, PA, 19013 Tel (610) 872-3716		2530 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA 19406 Tel (610) 270-0599		180 W. RIDGE PIKE LIMERICK, PA 19468 Tel (214) 329-5559		7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC 27606 Tel (919) 859-7420		2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel (317) 800-6386		7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC 28277 Tel (704) 531-9577		410 E. 21 STREET CHESTER, PA, 19013 Tel (610) 872-3716		1823 DEEP RUN ROAD PIPERSVILLE, PA 18447 Tel (215) 766-0409															
Revisions		Date																											



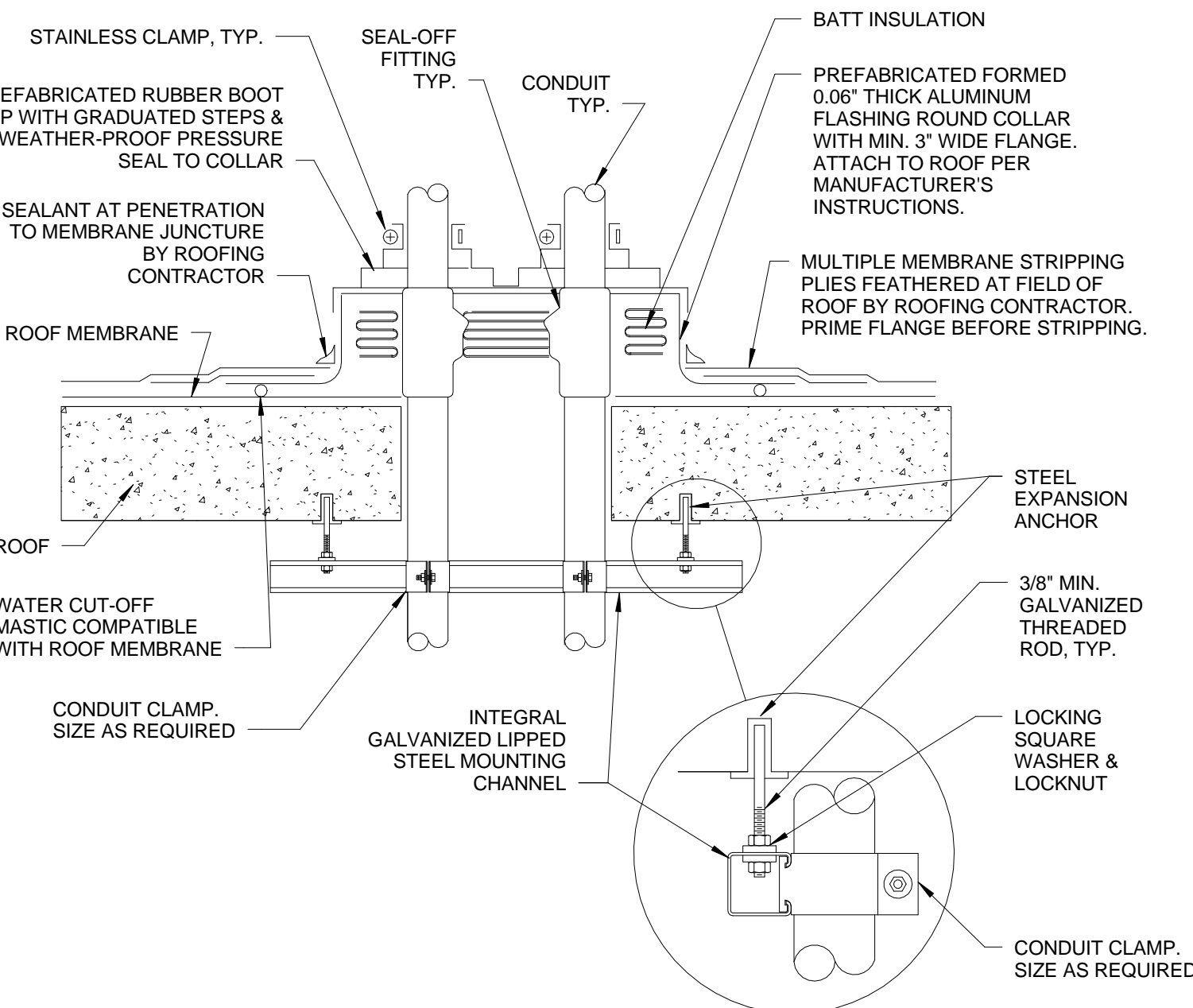






NOTE:  
1. SEE SPECIFICATION SECTION 27 10 00  
STRUCTURED CABLING-DATA/VOICE MEMO NO.  
FITS-02.  
2. USE YELLOW, BLUE AND WHITE JACKS.

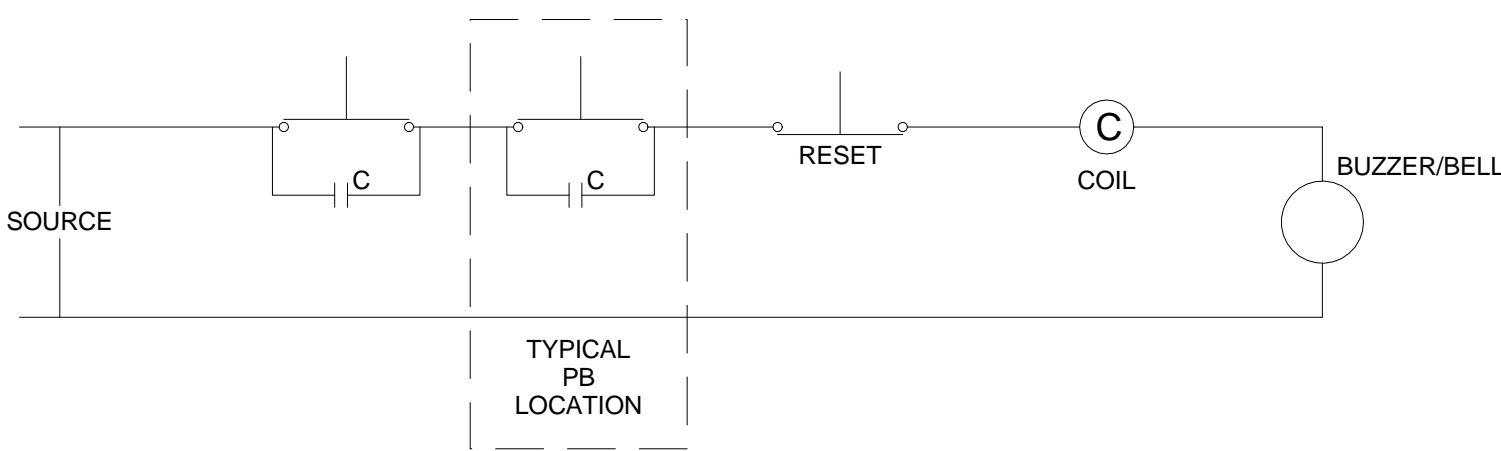
10 COMMUNICATION OUTLET DETAIL  
N.T.S.



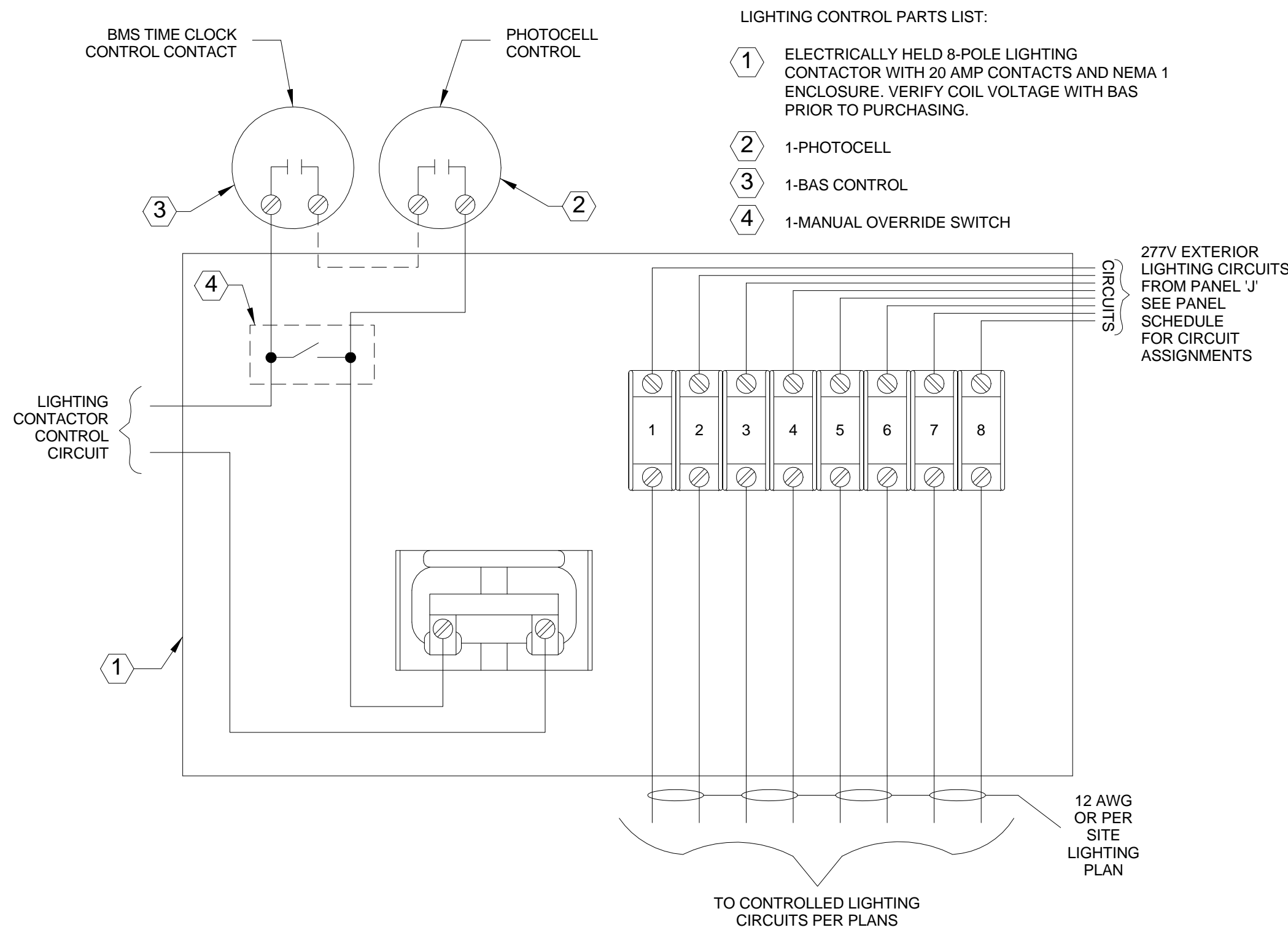
GENERAL NOTES:

1. MAINTAIN A MINIMUM CLEARANCE OF 12" (308 mm) ON ALL SIDES OF ROOF PENETRATION FROM WALLS, CURBS, AND OTHER PROJECTIONS TO FACILITATE PROPER FLASHING.
2. FLANGES OF ADJACENT FLASHING SHALL NOT BE CUT OR OVERLAPPED.
3. VERIFY ROOF & STRUCTURAL SYSTEM WITH ARCHITECT.
4. COORDINATE FLASHING INSTALLATION WITH ROOFING CONTRACTOR TO ENSURE PROPER METHODS & MATERIALS ARE USED TO MAINTAIN ROOF WARRANTY.

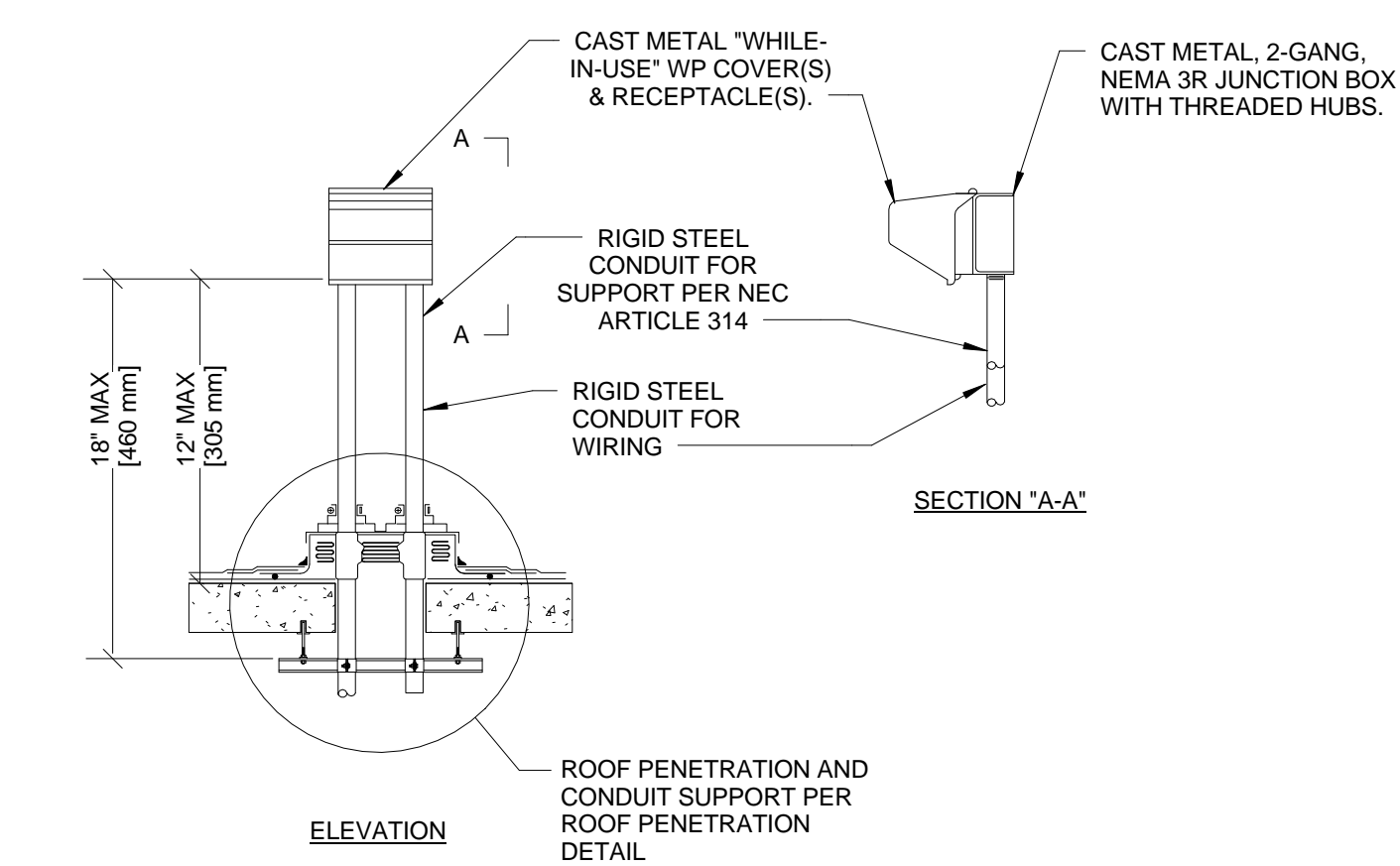
7 ROOF PENETRATION DETAIL  
N.T.S.



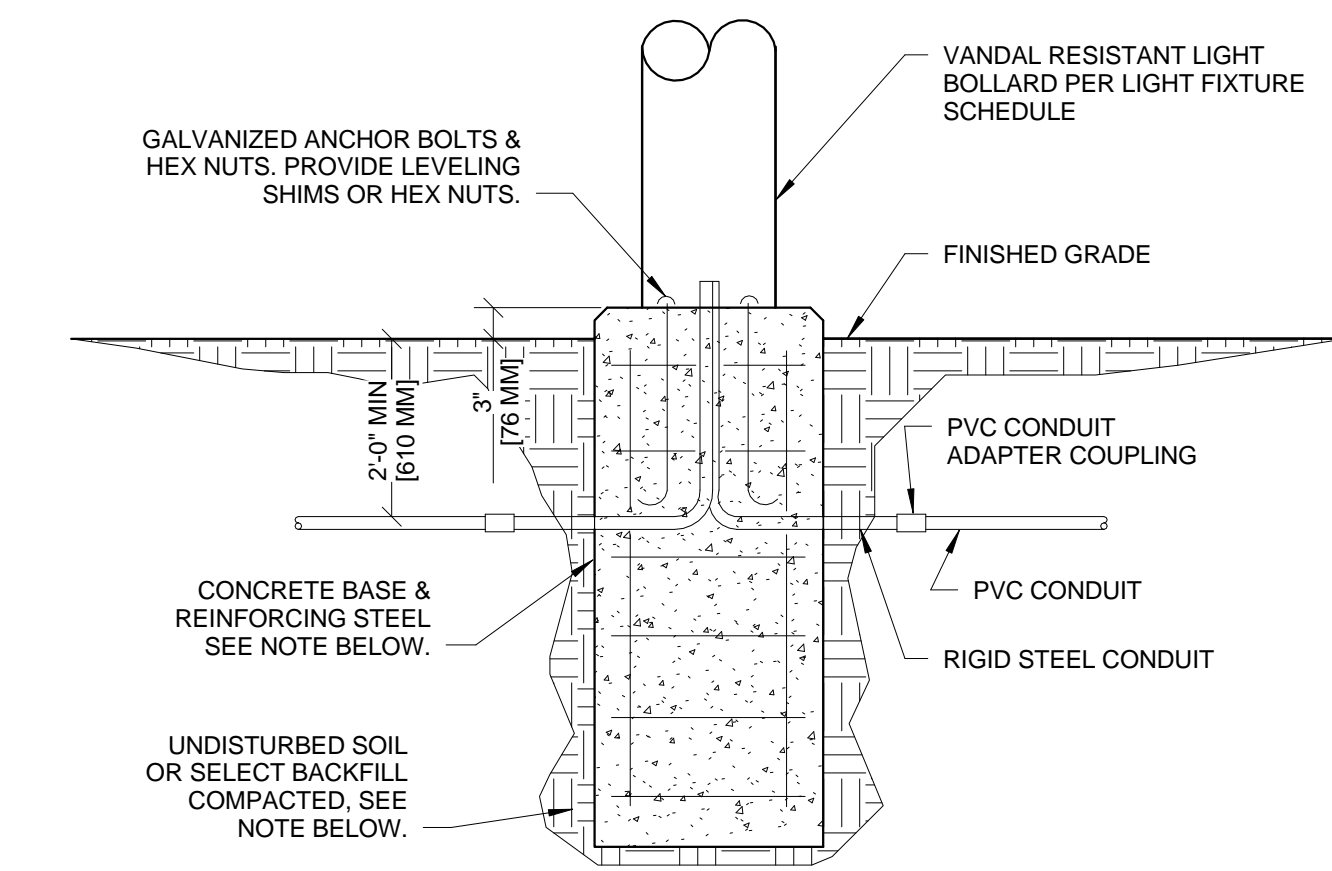
8 PANIC BUTTON DETAIL  
N.T.S.



9 LIGHTING CONTACTOR DETAIL  
N.T.S.



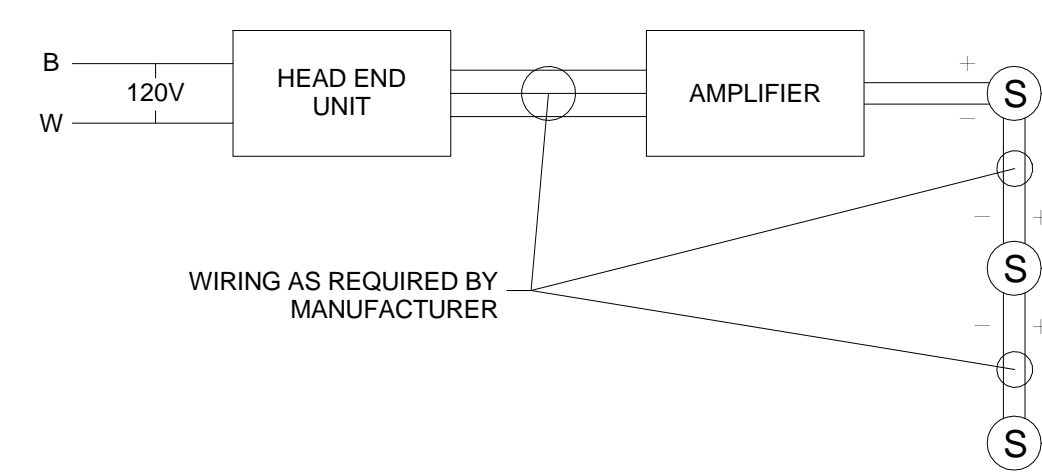
6 RECEPTACLE ROOF MOUNTING DETAIL  
N.T.S.



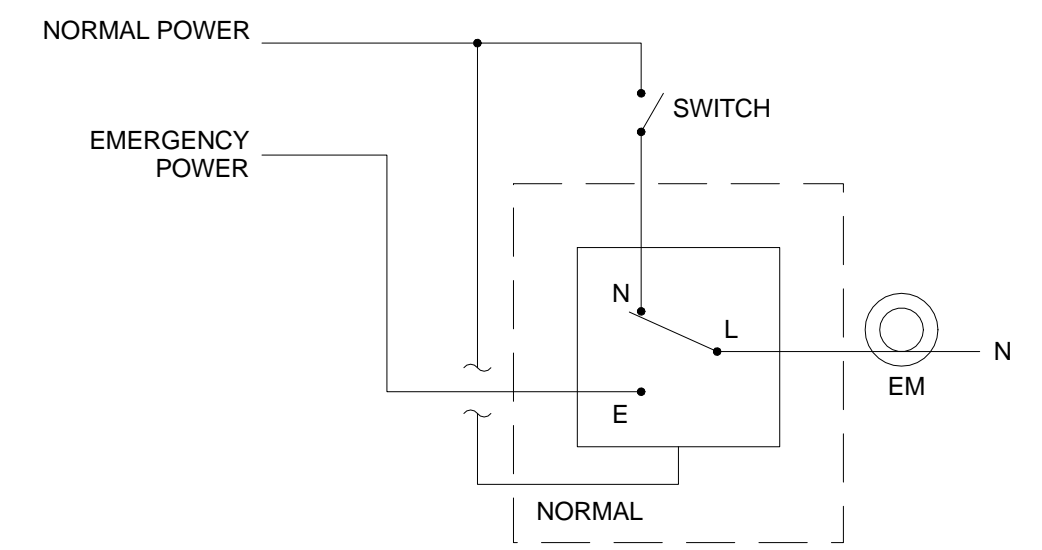
NOTE:

BACKFILL, CONCRETE, REINFORCING STEEL, AND ANCHOR BOLTS ARE SHOWN FOR REFERENCE ONLY. STRUCTURAL DESIGN IS SHOWN ON STRUCTURAL DRAWINGS.

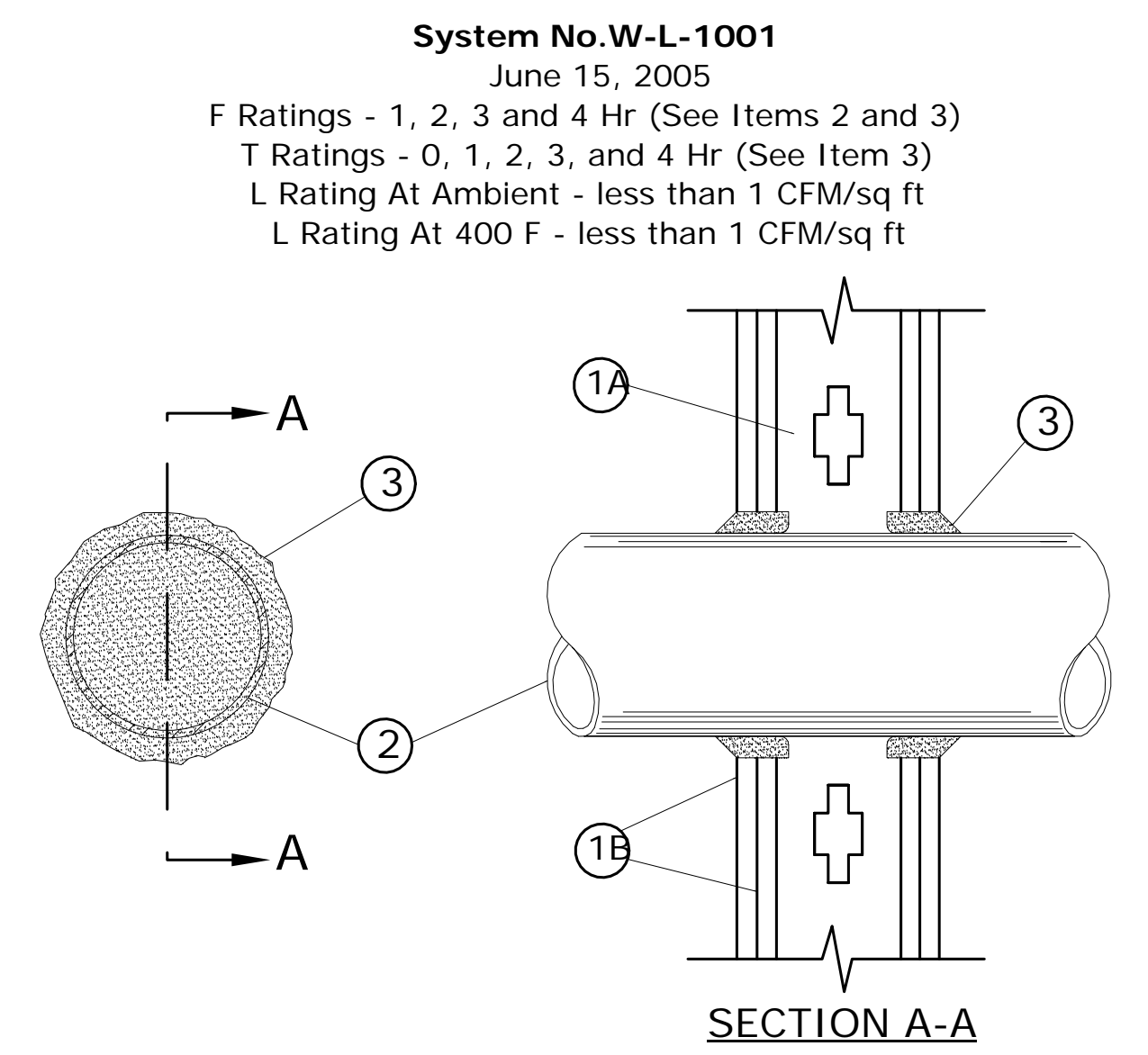
5 BOLLARD BASE DETAIL  
N.T.S.



4 PA SYSTEM SCHEMATIC  
N.T.S.



3 EMERGENCY LIGHTING CONTROL DETAIL  
N.T.S.



1. Wall Assembly - The 1, 2, 3 or 4 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

- A. Studs** - Wall framing may consist of either wood studs (max 2 hr fire rated assemblies) or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC with nom 2 by 4 in. (51 by 102 mm) lumber end plates and cross braces. Steel studs to be min 3-5/8 in. (92 mm) wide by 1-3/8 in. (35 mm) deep channels spaced max 24 in. (610 mm) OC.
- B. Gypsum Board** - Nom 1/2 or 5/8 in. (13 or 16 mm) thick, 4 ft. (122 cm) wide with square or tapered edges. The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 26 in. (660 mm).

- 2. Through Penetrant** - One metallic pipe, conduit or tubing installed either concentrically or eccentrically within the firestop system. The annular space between pipe, conduit or tubing and periphery of opening shall be min of 0 in. (0 mm) (point contact) to max 2 in. (51 mm). Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
- A. Steel Pipe** - Nom 24 in. (610 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
- B. Iron Pipe** - Nom 24 in. (610 mm) diam (or smaller) service weight (or heavier) cast iron soil pipe, nom 12 in. (305 mm) diam (or smaller) or Class 50 (or heavier) ductile iron pressure pipe.
- C. Conduit** - Nom 6 in. (152 mm) diam (or smaller) steel conduit or nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing.
- D. Copper Tubing** - Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing.
- E. Copper Pipe** - Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.
- F. Through Penetrating Product** - Flexible Metal Piping - The following types of steel flexible metal gas piping may be used:

1. Nom 2 in. (51 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.

OMEGA FLEX INC

2. Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.

TITEFLEX CORP

A BUNDY CO

3. Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.

WARD MFG INC

- 3. Fill, Void or Cavity Material** - Caulk or Sealant - Min 5/8, 1-1/4, 1-7/8 and 2-1/2 in. (16, 32, 48 and 64 mm) thickness of caulk for 1, 2, 3, and 4 hr rated assemblies, respectively, applied within annulus, flush with both surfaces of wall. Min 1/4 in. (6 mm) diam bead of caulk applied to gypsum board/penetrant interface at point contact location on both sides of wall. The hourly F Rating of the firestop system is dependent upon the hourly fire rating of the wall assembly in which it is installed, as shown in the following table. The hourly T Rating of the firestop system is dependent upon the type or size of the pipe or conduit and the hourly fire rating of the wall assembly in which it is installed, as tabulated below:

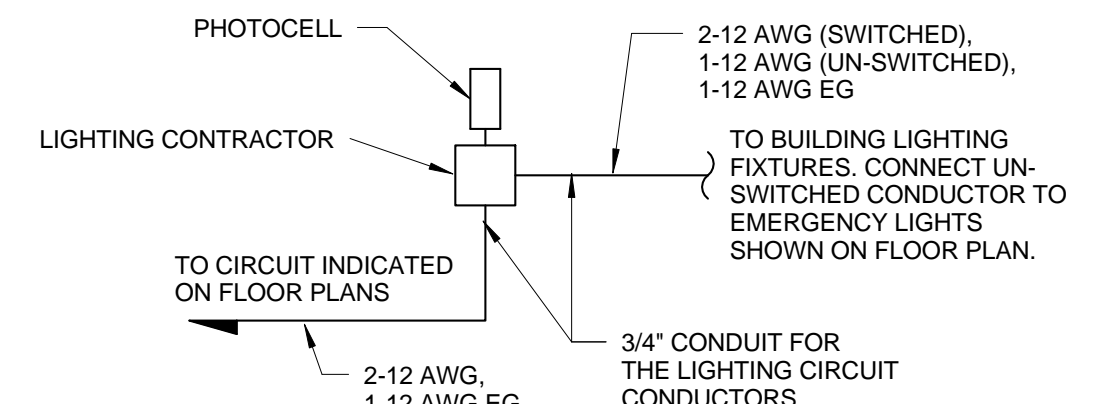
Max Pipe or Conduit Diam in. (mm)	F Rating Hr	T Rating Hr
1 (25)	1 or 2	0+ 1 or 2
1 (25)	3 or 4	3 or 4
4 (102)	1 or 2	0
6 (152)	3 or 4	0
12 (305)	1 or 2	0

+When copper pipe is used, T Rating is 0 hr.

**3M COMPANY** - CP 25WB+ caulk or FB-3000 WT sealant.

\*Bearing the UL Classification Marking

2 CONDUIT PENETRATION THROUGH GYPSUM ASSEMBLY (UL #W-L-1001)  
N.T.S.



1 EXTERIOR LIGHTING CONTROL DETAIL  
N.T.S.

FULLY SPRINKLERED  
ISSUED FOR BID

CONSULTANTS:								PROJECT MANAGER:		Project Number 3627	Scale As indicated	Drawing Title  ELECTRICAL DETAILS	Project Title  RENOVATE BUILDING 69	VA Project Number 542-CSI-203	Office of Facilities Management	
Project Manager BRAY MOONEY CONSULTING	Architect ARRAY HEALTHCARE FACILITIES SOLUTIONS	Structural Engineer WZG, STRUCTURAL CONSULTING ENGINEERS	MEP/FP Engineer APOGEE CONSULTING GROUP	Civil Engineer GUIDON DESIGN	Fire Protection Consultant HARRINGTON GROUP	Cost Estimator BRAY MOONEY CONSULTING	Aquatic Consultant ATLANTIC AQUATIC ENGINEERING					Building Number 69				
410 E. 21 STREET CHESTER, PA, 19013 Tel (610) 872-3716	2530 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA, 19406 Tel (610) 270-0599	180 W. RIDGE PIKE LIMERICK, PA, 19469 Tel (214) 329-5559	7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC 27606 Tel (919) 859-7420	2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel (317) 800-6386	7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC 28277 Tel (704) 531-9577	410 E. 21 STREET CHESTER, PA, 19013 Tel (610) 872-3716	1823 DEEP RUN ROAD PIPERSVILLE, PA, 18947 Tel (215) 766-0409					Drawing Number E-501				
Revisions		Date								Approved: Project Director		Location 1400 Black Horse Hill, Coatesville, PA		Dwg. 77 of 86	 Department of Veterans Affairs	
												Date 3/29/13	Checked CGS/WCM	Drawn KLC		



one eighth inch = one foot  
one quarter inch = one foot  
three eighths inch = one foot  
one half inch = one foot  
three quarters inch = one foot  
one inch = one foot  
one and one half inches = one foot  
two inches = one foot  
three inches = one foot

1 ELECTRICAL SINGLE-LINE DIAGRAM  
N.T.S.

Revisions

Date

CONSULTANTS:

Project Manager

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MEP/FP Engineer

APOGEE CONSULTING GROUP

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GUIDON DESIGN

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Fire Protection Consultant

HARRINGTON GROUP

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Cost Estimator

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ATLANTIC AQUATIC ENGINEERING

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PIPERSVILLE, PA, 18947  
Tel: (215) 766-0409

PROJECT MANAGER:

Bray Mooney Consulting

Project Number 3627

Scale 3/16" = 1'-0"

Drawing Title

ELECTRICAL SINGLE-LINE DIAGRAM AND EQUIPMENT CONDUCTOR SCHEDULE

Approved: Project Director

Project Title

RENOVATE BUILDING 69

Location 1400 Black Horse Hill, Coatesville, PA

Date 3/29/13

Checked CGS/WCM

Drawn KLC

VA Project Number 542-CSI-203

Building Number 69

Drawing Number E-601

Dwg. 78 of 86

Office of Facilities Management

Department of Veterans Affairs

EQUIPMENT CONDUCTOR SCHEDULE											
TAG	DESCRIPTION	VOLTS	PHASE	LOAD	MOCF	CONDUCTORS	NEUTRAL	GROUND	CONDUIT	PLUG	DISCONNECT TYPE
KILN 1	LL KILNS	208	1	48 A	2P-60	2 6 AWG	6 AWG	10 AWG	3/4"	---	60A NEMA 1
KILN 2	SKUTT KILN	208	1	48 A	2P-60	2 6 AWG	6 AWG	10 AWG	3/4"	---	60A NEMA 1
---	RANGE	208	1	8000 W	2P-50	2 8 AWG	---	10 AWG	3/4"	NEMA 6-50	---
D	DRYER	208	1	4500 W	2P-30	2 10 AWG	---	10 AWG	3/4"	---	---
W	WASHER	120	1	1200 W	1P-20	1 12 AWG	12 AWG	12 AWG	3/4"	NEMA 5-20	---
DW	DISH WASHER	120	1	1200 W	1P-20	1 12 AWG	12 AWG	12 AWG	3/4"	NEMA 5-20	---
R	REFRIGERATOR	120	1	1200 W	1P-20	1 12 AWG	12 AWG	12 AWG	3/4"	NEMA 5-20	---
---	SOUND BOOTH	120	1	1200 W	1P-20	1 12 AWG	12 AWG	12 AWG	3/4"	---	---
69-FCU-1	FAN COIL UNIT	277	1	40 W	1P-20	1 12 AWG	12 AWG	12 AWG	3/4"	---	INTERGRAL
69-FCU-2	FAN COIL UNIT	277	1	40 W	1P-20	1 12 AWG	12 AWG	12 AWG	3/4"	---	INTERGRAL
69-FCU-3	FAN COIL UNIT	277	1	20 W	1P-20	1 12 AWG	12 AWG	12 AWG	3/4"	---	INTERGRAL
HWP-3	HEATING WATER PUMPS	460	3	1.5 HP	3P-20	3 12 AWG	---	12 AWG	3/4"	---	VFD
HWP-4	HEATING WATER PUMPS	460	3	1.5 HP	3P-20	3 12 AWG	---	12 AWG	3/4"	---	VFD
CWP-3	COLD WATER PUMP	460	3	3 HP	3P-20	3 12 AWG	---	12 AWG	3/4"	---	VFD
CWP-4	COLD WATER PUMP	460	3	3 HP	3P-20	3 12 AWG	---	12 AWG	3/4"	---	VFD
PP-1	POOL RECIRC. PUMP	208	3	2 HP	3P-15	3 12 AWG	---	12 AWG	3/4"	---	30A NEMA 1
PP-2	POOL JET PUMP	208	3	3 HP	3P-20	3 12 AWG	---	12 AWG	3/4"	---	30A NEMA 1
P-3	POOL MECHANICAL PUMP	208	3	1 HP	3P-20	3 12 AWG	---	12 AWG	3/4"	---	30A NEMA 1
P-4	POOL MECHANICAL PUMP	120	1	0.125 HP	1P-20	1 12 AWG	12 AWG	12 AWG	3/4"	---	30A NEMA 1
P-5	POOL RADIANT FLOOR	120	1	0.125 HP	1P-20	1 12 AWG	12 AWG	12 AWG	3/4"	---	30A NEMA 1
PF-1	POOL EVACUATOR FAN	120	1	1/4 HP	1P-20	1 12 AWG	12 AWG	12 AWG	3/4"	---	VFD/MOTOR SWITCH
DHU-1	POOL AHU	460	3	54 MCA	3P-60	3 6 AWG	---	10 AWG	1 1/4"	---	60A NEMA 1
---	UV CONTROL PANEL	120	1	---	1P-20	1 12 AWG	12 AWG	12 AWG	3/4"	---	30A NEMA 1
---	CHEMICAL CONTROLLER	120	1	---	1P-20	1 12 AWG	12 AWG	12 AWG	3/4"	---	30A NEMA 1
UH-1	UNIT HEATER	120	1	1.6 A	1P-20	1 12 AWG	12 AWG	12 AWG	3/4"	---	30A NEMA 1
EF-1	EXHAUST FAN (ON ROOF)	115	1	1/2 HP	1P-20	1 12 AWG	12 AWG	12 AWG	3/4"	---	30A NEMA 3R
EF-2	EXHAUST FAN (ON ROOF)	115	1	1/30 HP	1P-20	1 12 AWG	12 AWG	12 AWG	3/4"	---	30A NEMA 3R
EF-3	EXHAUST FAN (ON ROOF)	115	1	1/40 HP	1P-20	1 12 AWG	12 AWG	12 AWG	3/4"	---	30A NEMA 3R
EF-4	EXHAUST FAN	115	1	83 W	1P-20	1 12 AWG	12 AWG	12 AWG	3/4"	---	30A NEMA 1
EF-5	EXHAUST FAN	115	1	83 W	1P-20	1 12 AWG	12 AWG	12 AWG	3/4"	---	30A NEMA 1

- KEY
- NOTE
- 1

REPLACE EXISTING 400A FUSES WITH NEW 225A FUSES.
- 2

INSTALL 2-1/2" EMT WITH 4-4/0 AWG AND 1-4 AWG EG TO NEW PANEL '69H' LOCATION IN POOL MECHANICAL ROOM 1-606.
- 3

ONLY USE ONE SECTION OF EXISTING PANEL '69H' FOR POOL EQUIPMENT

FULLY SPRINKLERED  
ISSUED FOR BID



LOAD SERVED				KVA / Phase			CKT NO	CKT BRKR	NEUTRAL A B C	CKT NO	CKT BRKR	KVA / Phase			LOAD SERVED					
				A	B	C						A	B	C						
MICROWAVE 1-604				1.20	---	---	1P-20	1		2	1P-20	0.00	---	---	SPARE					
REFRIGERATOR 1-604				---	1.20	---	1P-20	3		4	1P-20	---	0.00	---	SPARE					
COPIER/PRINTER 1-604				---	---	1.20	1P-20	5		6	1P-20	---	---	0.00	SPARE					
SPARE				0.00	---	---	2P-30	7		8		0.00	---	---						
				---	0.00	---		9		10	3P-50	---	0.00	---	SPARE					
				---	---	0.00		11		12	---	---	0.00	---						
SPARE				0.00	---	---	3P-50	13		14		0.00	---	---						
				---	0.00	---		15		16	3P-40	---	0.00	---	SPARE					
SPARE				---	---	0.00	2P-15	17		18	---	---	0.00	---						
				0.00	---	---		19		20	1P-20	0.00	---	---	SPARE					
SPARE				---	0.00	---	2P-15	21		22	2P-20	---	0.00	---	SPARE					
				---	---	0.00		23		24	---	---	0.00	---						
SPARE				0.00	---	---	1P-20	25		26	1P-20	0.00	---	---	SPARE					
SPARE				---	0.00	---	1P-20	27		28	1P-20	---	0.00	---	SPARE					
SPARE				---	---	0.00	1P-20	29		30	1P-20	---	---	0.00	SPARE					
SPARE				0.00	---	---	1P-20	31		32	1P-20	0.00	---	---	SPARE					
SPARE				---	0.00	---	1P-20	33		34	1P-20	---	0.00	---	SPARE					
				---	---	0.00		35		36	1P-20	---	---	0.00	SPARE					
SPARE				0.00	---	---	3P-20	37		38		0.00	---	---						
				---	0.00	---		39		40	3P-40	---	0.00	---	SPARE					
SPARE				---	---	0.00	1P-20	41		42	---	---	0.00	---						
SUB TOTAL				1.20	1.20	1.20						0.00	0.00	0.00	SUB TOTAL					
												1.20	1.20	1.20	TOTAL					
C/B TEMP. 75 C. RATING				120	208	V 3 PH 4 WIRE	LOAD TYPE					CONNECTED KVA			NEC DEM FACTOR	DEMAND KVA				
												A	B	C		A	B	C		
MOUNTING SURFACE				YES		X	NO	GENERAL LIGHTING					0.00	0.00	0.00	125%	0.00	0.00	0.00	
ISOLATED GROUND BUS				X	YES		NO	GENERAL USE RECEPT					0.00	0.00	0.00	<=10 KVA@100%	0.00	0.00	0.00	
MAIN CIRCUIT BREAKER					YES		NO									>10KVA@50%	0.00	0.00	0.00	
SERVICE ENTR. RATED								MOTORS AND EQUIPMENT					LARGEST	0.00	0.00	0.00	125%	0.00	0.00	0.00
MINIMUM AIC (K AMPS)													ALL OTHERS	0.00	0.00	0.00	100%	0.00	0.00	0.00
MCB RATING 400A								DEDICATED RECEPT						1.20	1.20	1.20	100%	1.20	1.20	1.20
BUS RATING 400A																				
NEUTRAL RATING 100%																				
NOTE: ALL MOTOR CIRCUIT BREAKERS MUST BE HACR RATED.																				
												TOTAL KVA PER PHASE			1.20	1.20	1.20	1.20	1.20	1.20
												TOTAL DEMAND AMPERES PER PHASE						10	10	10
												PANEL / FEEDER (TOTAL KVA)								3.60
(TOTAL KVA) X 1000 = TOTAL AMPS																				
VOLTS X 1.732																				
EXISTING PANEL '69C'																				

LOAD SERVED				KVA / Phase			CKT NO	NEUTRAL A B C	CKT NO	CKT BRKR	KVA / Phase			LOAD SERVED				
A	B	C	A	B	C													
RECPT 1-119, 1-129	1.08	---	---	1P-20	1		2	1P-20	1.20	---	---	COPIER/PRINTER 1-129						
RECPT 1-119	---	1.08	---	1P-20	3		4	1P-20	---	1.08	---	RECPT 1-118, 1-119, EXTERIOR						
J-BOX RELOCATED LIFT 1-119	---	---	1.00	1P-20	5		6	1P-20	---	---	1.08	RECPT 1-111, 1-112						
RECPT 1-117 & TASK LTG	1.11	---	---	1P-20	7		8	1P-20	1.08	---	---	RECPT 1-109, 1-111, 1-112						
RECPT 1-116 & TASK LTG	---	1.11	---	1P-20	9		10	1P-20	---	1.11	---	RECPT 1-115 & TASK LTG						
RECPT 1-108, 1-110, 1-114	---	---	0.90	1P-20	11		12	1P-20	---	---	1.20	COPIER/PRINTER 1-105						
RECPT 1-113 & TASK LTG	1.11	---	---	1P-20	13		14	1P-20	1.08	---	---	RECPT 1-105						
RECPT 1-104, 1-106, EXTERIOR	---	1.08	---	1P-20	15		16	1P-20	---	1.00	---	WATER COOLER 1-100						
COPIER/PRINTER 1-104	---	---	1.20	1P-20	17		18	1P-20	---	---	1.00	WATER COOLER 1-100						
COPIER/PRINTER 1-103	1.20	---	---	1P-20	19		20	1P-20	1.00	---	---	PROJECTOR 1-101						
COPIER/PRINTER 1-102	---	1.20	---	1P-20	21		22	1P-20	---	1.20	---	COPIER/PRINTER 1-204						
RECPT 1-102, 1-103	---	---	1.08	1P-20	23		24	1P-20	---	---	1.08	RECPT 1-202						
RECPT 1-000, 1-100, 1-101, 1-104	1.08	---	---	1P-20	25		26	1P-20	1.08	---	---	RECPT 1-204						
RECPT 1-204 & TASK LTG	---	1.04	---	1P-20	27		28	1P-20	---	1.10	---	RECPT 1-201, 1-202 & TASK LTG						
RECPT 1-202	---	---	1.08	1P-20	29		30	1P-20	---	---	1.20	TREADMILL 1-205						
RECPT 1-203, 1-205	0.90	---	---	1P-20	31		32	1P-20	1.20	---	---	COPIER/PRINTER 1-119						
TREADMILL 1-205	---	1.00	---	1P-20	33		34	--	---	0.00	---	SPACE						
RECPT 1-131, 1-132	---	---	1.08	1P-20	35		36	--	---	---	0.00	SPACE						
SPACE	0.00	---	---	--	37		38	--	0.00	---	---	SPACE						
SPACE	---	0.00	---	--	39		40	--	---	0.00	---	SPACE						
SPACE	---	---	0.00	--	41		42	--	---	---	0.00	SPACE						
SUB TOTAL	6.48	6.52	6.34						6.64	5.50	5.56	SUB TOTAL						
									13.12	12.01	11.90	TOTAL						
C/B TEMP. 75 C. RATING 120 208 V_3 PH_4 WIRE									CONNECTED KVA			LOAD TYPE						
									A	B	C							
MOUNTING SURFACE									NEC DEM FACTOR			DEMAND KVA						
									A	B	C							
ISOLATED GROUND BUS									0.06	0.23	0.00	125%	0.08	0.29	0.00			
MAIN CIRCUIT BREAKER									8.46	7.38	6.30	<=10 KVA@100%	3.33	3.33	3.33			
SERVICE ENTR. RATED									0.00	0.00	0.00	>10KVA@50%	2.57	2.03	1.49			
MINIMUM AIC (K AMPS)									0.00	0.00	0.00	LARGEST	0.00	0.00	0.00			
MCB RATING _225A									0.00	0.00	0.00	ALL OTHERS	0.00	0.00	0.00			
BUS RATING _225A									4.60	4.40	5.60	DEDICATED RECEPT	4.60	4.40	5.60			
NEUTRAL RATING _100%																		
												NOTE: ALL MOTOR CIRCUIT BREAKERS MUST BE HACR RATED.						
									TOTAL KVA PER PHASE			13.12	12.01	11.90				
									TOTAL DEMAND AMPERES PER PHASE									
									PANEL / FEEDER (TOTAL KVA)									
												(TOTAL KVA) X 1000 = TOTAL AMPS						
EXISTING PANEL '69B'													VOLTS X 1.732					
															86			

LOAD SERVED				KVA / Phase			CKT BRKR	CKT NO	NEUTRAL A B C	CKT NO	CKT BRKR	KVA / Phase			LOAD SERVED			
				A	B	C						A	B	C				
SPARE				0.00	---	---	2P-30	1		2	1P-20	1.20	---	---	REFRIGERATOR 1-416			
				---	0.00	---		3		4	1P-20	---	1.08	---	RECPT 1-415, 1-416			
SPARE				---	---	0.00	1P-20	5		6	1P-20	---	---	0.72	RECPT 1-416			
SPARE				0.00	---	---	1P-20	7		8	1P-20	0.93	---	---	RECPT 1-411 & TASK LTG			
SPARE				---	0.00	---	1P-20	9		10	1P-20	---	0.90	---	RECPT 1-412			
SPARE				---	---	0.00	1P-20	11		12	1P-20	---	---	1.16	RECPT 1-412 & TASK LTG			
SPARE				0.00	---	---	1P-20	13		14	1P-20	1.01	---	---	RECPT 1-412 & TASK LTG			
SPARE				---	0.00	---	1P-20	15		16	1P-20	---	1.20	---	COPIER/PRINTER 1-416			
SPARE				---	---	0.00	1P-20	17		18	1P-20	---	---	1.20	COPIER/PRINTER 1-412			
SPARE				0.00	---	---	1P-20	19		20	1P-20	0.00	---	---	SPARE			
SPARE				---	0.00	---	1P-20	21		22	1P-20	---	0.93	---	RECPT 1-409 & TASK LTG			
SPARE				---	---	0.00	1P-20	23		24	1P-20	---	---	0.93	RECPT 1-408 & TASK LTG			
SPARE				0.00	---	---	1P-20	25		26	1P-20	0.00	---	---	SPARE			
SPARE				---	0.00	---	2P-40	27		28	2P-20	---	0.00	---	SPARE			
				---	---	0.00		29		---	---	---	0.00					
				0.00	---	---	2P-20	31		32	2P-20	0.00	---	---	SPARE			
SPARE				---	0.00	---		33		34	---	---	0.00	---				
				---	---	0.00		35		36	1P-20	---	---	0.00	SPARE			
				0.00	---	---	3P-30	37		38	1P-20	0.00	---	---	SPARE			
SPARE				---	0.00	---		39		40	1P-20	---	0.00	---	SPARE			
				---	---	0.00	--	41		42	--	---	---	0.00	SPACE			
SUB TOTAL				0.00	0.00	0.00					3.14	4.11	4.02	SUB TOTAL				
												3.14	4.11	4.02	TOTAL			
C/B TEMP. 75 C.		RATING	120	208 V 3 PH 4 WIRE		LOAD TYPE				CONNECTED KVA			NEC DEM FACTOR	DEMAND KVA				
MOUNTING SURFACE						GENERAL LIGHTING				A	B	C		A	B	C		
ISOLATED GROUND BUS			YES		X	GENERAL USE				0.14	0.03	0.12	125%	0.18	0.04	0.15		
MAIN CIRCUIT BREAKER		X	YES		NO	RECEPT				1.80	2.88	2.70	≤10KVA@100%	1.80	2.88	2.70		
SERVICE ENTR. RATED			YES		X	MOTORS AND EQUIPMENT				LARGEST	0.00	0.00	0.00	125%	0.00	0.00	0.00	
MINIMUM AIC (K AMPS)						ALL OTHERS				0.00	0.00	0.00	100%	0.00	0.00	0.00		
MCB RATING 225A						DEDICATED RECEPT				1.20	1.20	1.20	100%	1.20	1.20	1.20		
BUS RATING 225A																		
NEUTRAL RATING 100%																		
NOTE: ALL MOTOR CIRCUIT BREAKERS MUST BE HACR RATED.										TOTAL KVA PER PHASE			3.14	4.11	4.02	3.18	4.12	4.05
										TOTAL DEMAND AMPERES PER PHASE						27	34	34
										PANEL / FEEDER (TOTAL KVA)						11.35		
EXISTING PANEL '69D'										(TOTAL KVA) X 1000 = TOTAL AMPS VOLTS X 1.732						31		



LOAD SERVED	KVA / Phase			CKT BRKR	CKT NO	NEUTRAL A B C	CKT NO	CKT BRKR	KVA / Phase			LOAD SERVED
	A	B	C						A	B	C	
POOL RECIRC. PUMP PP-1	0.90	---	---	3P-15	1		2	1P-20	0.36	---	---	RECPTS 1-603, 1-606
	---	0.90	---		3		4	1P-20	---	1.50	---	CHEMICAL CONTROLLER
	---	---	0.90		5		6	1P-20	---	---	1.20	UV CONTROL PANEL
POOL JET PUMP PP-2	1.27	---	---	3P-20	7		8	1P-20	0.70	---	---	POOL EVACUATOR FAN PF-1
	---	1.27	---		9		10	1P-20	---	0.72	---	RECPTS 1-603
	---	---	1.27		11		12	--	---	---	0.00	SPACE
E-STOP BUTTON FOR PUMPS	0.20	---	---	1P-20	13		14	--	0.00	---	---	SPACE
	---	0.55	---		15		16	--	---	0.00	---	SPACE
POOL MECHANICAL PUMP P-3	---	---	0.55	3P-20	17		18	--	---	---	0.00	SPACE
	0.55	---	---		19		20	--	---	0.00	---	SPACE
POOL MECHANICAL PUMP P-4	---	0.36	---	1P-20	21		22	--	---	0.00	---	SPACE
POOL RADIANT FLOOR PUMP P-5	---	---	0.36	1P-20	23		24	--	---	---	0.00	SPACE
69UH-1 UNIT HEATER	0.19	---	---	1P-20	25		26	--	---	0.00	---	SPACE
SPACE	---	0.00	---	--	27		28	--	---	0.00	---	SPACE
SPACE	---	---	0.00	--	29		30	--	---	---	0.00	SPACE
SPACE	0.00	---	---	--	31		32	--	---	0.00	---	SPACE
SPACE	---	0.00	---	--	33		34	--	---	0.00	---	SPACE
SPACE	---	---	0.00	--	35		36	--	---	---	0.00	SPACE
SPACE	0.00	---	---	--	37		38	--	---	0.00	---	SPACE
SPACE	---	0.00	---	--	39		40	--	---	---	0.00	SPACE
SPACE	---	---	0.00	--	41		42	--	---	---	0.00	SPACE
SUB TOTAL	3.11	3.08	3.08					1.06 2.22 1.20			SUB TOTAL	
								4.17 5.30 4.28			TOTAL	
C/B TEMP. 75 C. RATING 120 208 V 3 PH 4 WIRE								CONNECTED KVA			NEC DEM FACTOR	
								A B C			A B C	
MOUNTING SURFACE								0.00 0.00 0.00			125%	
ISOLATED GROUND BUS								0.36 0.72 0.00			<=10 KVA@100%	
MAIN CIRCUIT BREAKER											>10KVA@50%	
SERVICE ENTR. RATED								1.27 1.27 1.27			1.59 1.59 1.59	
MINIMUM AIC (K AMPS)								2.35 3.31 3.01			100%	
MCB RATING 225A								0.00 0.00 0.00			100%	
BUS RATING 400A								0.19 0.00 0.00			100%	
NEUTRAL RATING 100%												
								TOTAL KVA PER PHASE			4.49 5.62 4.60	
								TOTAL DEMAND AMPERES PER PHASE			37 47 38	
								PANEL / FEEDER (TOTAL KVA)				
											14.70	
RELOCATED PANEL '69H'								(TOTAL KVA) X 1000 = TOTAL AMPS				
								VOLTS X 1.732				
											41	

LOAD SERVED				KVA / Phase			CKT BRKR	CKT NO	NEUTRAL A B C	CKT NO	CKT BRKR	KVA / Phase			LOAD SERVED						
A	B	C	A	B	C																
SPACE	0.00	---	---	--	1		2	--	0.00	---	---	SPACE									
SPACE	---	0.00	---	--	3		4	--	---	0.00	---	SPACE									
SPACE	---	---	0.00	--	5		6	--	---	---	0.00	SPACE									
SPACE	0.00	---	---	--	7		8	--	0.00	---	---	SPACE									
SPACE	---	0.00	---	--	9		10	--	---	0.00	---	SPACE									
SPACE	---	---	0.00	--	11		12	--	---	---	0.00	SPACE									
SPACE	0.00	---	---	--	13		14	--	0.00	---	---	SPACE									
SPACE	---	0.00	---	--	15		16	--	---	0.00	---	SPACE									
SPACE	---	---	0.00	--	17		18	--	---	---	0.00	SPACE									
SPACE	0.00	---	---	--	19		20	--	0.00	---	---	SPACE									
SPACE	---	0.00	---	--	21		22	--	---	0.00	---	SPACE									
SPACE	---	---	0.00	--	23		24	--	---	---	0.00	SPACE									
SPACE	0.00	---	---	--	25		26	--	0.00	---	---	SPACE									
SPACE	---	0.00	---	--	27		28	--	---	0.00	---	SPACE									
SPACE	---	---	0.00	--	29		30	--	---	---	0.00	SPACE									
SPACE	0.00	---	---	--	31		32	--	0.00	---	---	SPACE									
SPACE	---	0.00	---	--	33		34	--	---	0.00	---	SPACE									
SPACE	---	---	0.00	--	35		36	--	---	---	0.00	SPACE									
SPACE	0.00	---	---	--	37		38	--	0.00	---	---	SPACE									
SPACE	---	0.00	---	--	39		40	--	---	0.00	---	SPACE									
SPACE	---	---	0.00	--	41		42	--	---	---	0.00	SPACE									
SUB TOTAL	0.00	0.00	0.00						0.00	0.00	0.00	SUB TOTAL									
													TOTAL								
C/B TEMP. 75 C. RATING 120 208 V 3 PH 4 WIRE													CONNECTED KVA			NEC DEM FACTOR			DEMAND KVA		
MOUNTING SURFACE													A B C			A B C			A B C		
ISOLATED GROUND BUS													0.00 0.00 0.00			125%			0.00 0.00 0.00		
MAIN CIRCUIT BREAKER													0.00 0.00 0.00			<=10 KVA@100%			0.00 0.00 0.00		
SERVICE ENTR. RATED																>10KVA@50%			0.00 0.00 0.00		
MINIMUM AIC (K AMPS)													0.00 0.00 0.00			125%			0.00 0.00 0.00		
MCB RATING <u>MLO</u>													0.00 0.00 0.00			100%			0.00 0.00 0.00		
BUS RATING <u>200A</u>													0.00 0.00 0.00			100%			0.00 0.00 0.00		
NEUTRAL RATING <u>100%</u>																					
NOTE: ALL MOTOR CIRCUIT BREAKERS MUST BE HACR RATED.													TOTAL KVA PER PHASE			0.00 0.00 0.00			0.00 0.00 0.00		
													TOTAL DEMAND AMPERES PER PHASE			0 0 0					
													PANEL / FEEDER (TOTAL KVA)						0.00		
EXISTING PANEL '69G'													(TOTAL KVA) X 1000 = TOTAL AMPS								
													VOLTS X 1.732								

LOAD SERVED				KVA / Phase			CKT BRKR	CKT NO	NEUTRAL A B C			CKT NO	CKT BRKR	KVA / Phase			A	B	C	LOAD SERVED			
				A	B	C																	
RECPT 1-121,1-122A,1-223,1-133				1.08	---	---	1P-20	1				2	1P-20	1.20	---	---				J-BOX SOUND BOOTH			
RECPT 1-401,1-402				---	1.08	---	1P-20	3				4	1P-20	---	1.20	---				J-BOX SOUND BOOTH			
RECPT 388,1-403,1-404,1-416A				---	---	1.08	1P-20	5				6	1P-20	---	---	1.20				J-BOX SOUND BOOTH			
RECPT 1-406 & TASK LTG				0.93	---	---	1P-20	7				8	1P-20	1.20	---	---				J-BOX SOUND BOOTH			
J-BOX SOUND BOOTH				---	1.20	---	1P-20	9				10	1P-20	---	1.20	---				J-BOX SOUND BOOTH			
J-BOX SOUND BOOTH				---	---	1.20	1P-20	11				12	1P-20	---	---	1.20				J-BOX SOUND BOOTH			
RECPT 1-407 & TASK LTG				0.93	---	---	1P-20	13				14	1P-20	0.00	---	---				SPARE			
SPARE				---	0.00	---	2P-70	15				16	2P-30	---	0.00	---				SPARE			
SPACE				0.00	---	---	--	17				18	--	0.00	---	0.00				SPACE			
SPACE				---	0.00	---	--	21				22	--	---	0.00	---				SPACE			
SPACE				---	---	0.00	--	23				24	--	---	---	0.00				SPACE			
SPACE				0.00	---	---	--	25				26	--	0.00	---	---				SPACE			
SPACE				---	0.00	---	--	27				28	--	---	0.00	---				SPACE			
SPACE				---	---	0.00	--	29				30	--	---	---	0.00				SPACE			
SPACE				0.00	---	---	--	31				32	--	0.00	---	---				SPACE			
SPACE				---	0.00	---	--	33				34	--	---	0.00	---				SPACE			
SPACE				---	---	0.00	--	35				36	--	---	---	0.00				SPACE			
EXISTING PANEL 'F'				5.92	---	---	3P-200							0.00	---	---				EXISTING PANEL 'G'			
				---	4.64	---								---	0.00	---							
				---	---	5.48								---	---	0.00							
SUB TOTAL				8.86	6.92	7.76												2.40	2.40	2.40	SUB TOTAL		
															11.26	9.32	10.16	TOTAL					
C/B TEMP. 75 C.				RATING		120	208 V		3 PH		4 WIRE		LOAD TYPE			CONNECTED KVA			NEC DEM FACTOR		DEMAND KVA		
MOUNTING SURFACE																A	B	C	125%	A	B	C	
ISOLATED GROUND BUS				YES			X		NO		GENERAL LIGHTING			0.06	0.00	0.00	100%	0.08	0.00	0.00			
MAIN CIRCUIT BREAKER				X					NO		GENERAL USE RECEPT			5.40	2.52	2.16	<=10 KVA @ 100%	3.33	3.33	3.33			
SERVICE ENTR. RATED						YES	X		NO								>10KVA @ 50%	1.04	-0.41	-0.59			
MINIMUM AIC (K AMPS)											MOTORS AND EQUIPMENT			1.20	1.20	1.20	125%	1.50	1.50	1.50			
MCB RATING 400A											LARGEST ALL OTHERS			1.20	2.40	2.40	100%	1.20	2.40	2.40			
BUS RATING 400A											DEDICATED RECEPT			3.40	3.20	4.40	100%	3.40	3.20	4.40			
NEUTRAL RATING 100%											FIX. ELEC. SPACE HEAT			0.00	0.00	0.00	100%	0.00	0.00	0.00			
											TOTAL KVA PER PHASE			11.26	9.32	10.16		10.55	10.03	11.05			
											TOTAL DEMAND AMPERES PER PHASE							88	84	92			
											PANEL / FEEDER (TOTAL KVA)												
																					31.62		
EXISTING PANEL '69E'														[TOTAL KVA] X 1000 = TOTAL AMPS									
														VOLTS X 1.732									



Figure 1. The six types of the *Stylidium* flowers. A, *S. lineare* (one inch = one foot); B, *S. lineare* (one and half inches = one foot); C, *S. lineare* (one inch = one foot); D, *S. lineare* (three quarters inch = one foot); E, *S. lineare* (one half inch = one foot); F, *S. lineare* (one quarter inch = one foot). The scale bar represents 1 cm.

Figure 10: The 128-bit test vectors for the 128-bit version of the algorithm. The figure is divided into five sections labeled A, B, C, D, and E. Each section contains a table of test vectors. The columns are labeled with the input and output values. The rows are labeled with the input and output values. The input values are 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127. The output values are 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127. The input values are 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127. The output values are 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127.

one eighth inch = one foot

one quarter inch = one foot

three eighths inch = one foot

										PROJECT MANAGER:		Project Number 3627		Scale 3/16" = 1'-0"		Drawing Title ELECTRICAL PANEL SCHEDULES		Project Title RENOVATE BUILDING 69		VA Project Number 542-CSI-203		Office of Facilities Management <div>Department of Veterans Affairs</div>	
<div>CONSULTANTS:</div> <div><div><div>Project Manager</div><div>BRAY MOONEY CONSULTING</div><div>410 E. 21 STREET CHESTER, PA. 19013 Tel (610) 872-3716</div></div><div><div>Architect</div><div>ARRAY HEALTHCARE FACILITIES SOLUTIONS</div><div>2525 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA. 19406 Tel (610) 270-0599</div></div><div><div>Structural Engineer</div><div>WZG. STRUCTURAL CONSULTING ENGINEERS</div><div>180 W. RIDGE PIKE LIMERICK, PA. 19468 Tel (214) 329-5559</div></div><div><div>MERFPF Engineer</div><div>APOGEE CONSULTING GROUP</div><div>7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC. 27606 Tel (919) 856-7420</div></div><div><div>Civil Engineer</div><div>GUIDON DESIGN HARRINGTON GROUP</div><div>2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel (317) 800-6388</div></div><div><div>Fine Protection Consultant</div><div>BRAY MOONEY CONSULTING</div><div>7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC. 28277 Tel (704) 531-9077</div></div><div><div>Cost Estimator</div><div>ATLANTIC AQUATIC ENGINEERING</div><div>410 E. 21 STREET PPERSVILLE, PA. 19013 Tel (610) 872-3716</div></div><div><div>Aquatic Consultant</div><div>ATLANTIC AQUATIC ENGINEERING</div><div>1603 DEEP RUN ROAD PPERSVILLE, PA. 18947 Tel (215) 766-0409</div></div></div> <div><div>Bray Mooney Consulting</div><div></div></div>										Approved: Project Director		Location 1400 Black Horse Hill, Coatesville, PA		Building Number 69		Drawing Number E-604							
												Date 3/29/13		Checked CGSWCM		Drawn KLC		Dwg. 81 of 86					

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ISSUED FOR BID



A

three inches = one foot

1

one and one half inches = one foot

2

one inch = one foot

3

three quarters inch = one foot

4

one half inch = one foot

5

one quarter inch = one foot

6

one eighth inch = one foot

7

one sixteenth inch = one foot

8

one thirty second inch = one foot

9

one sixty fourth inch = one foot

10

one one hundred twenty eighth inch = one foot

11

one two hundred fifty sixth inch = one foot

12

one five hundred twelfth inch = one foot

13

one one thousand one hundred twenty fourth inch = one foot

14

one two thousand two hundred forty eighth inch = one foot

15

one four thousand four hundred ninety sixth inch = one foot

A

B

C

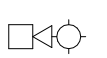
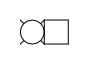



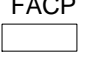
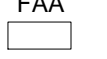
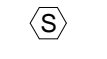
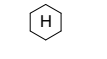


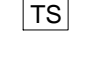
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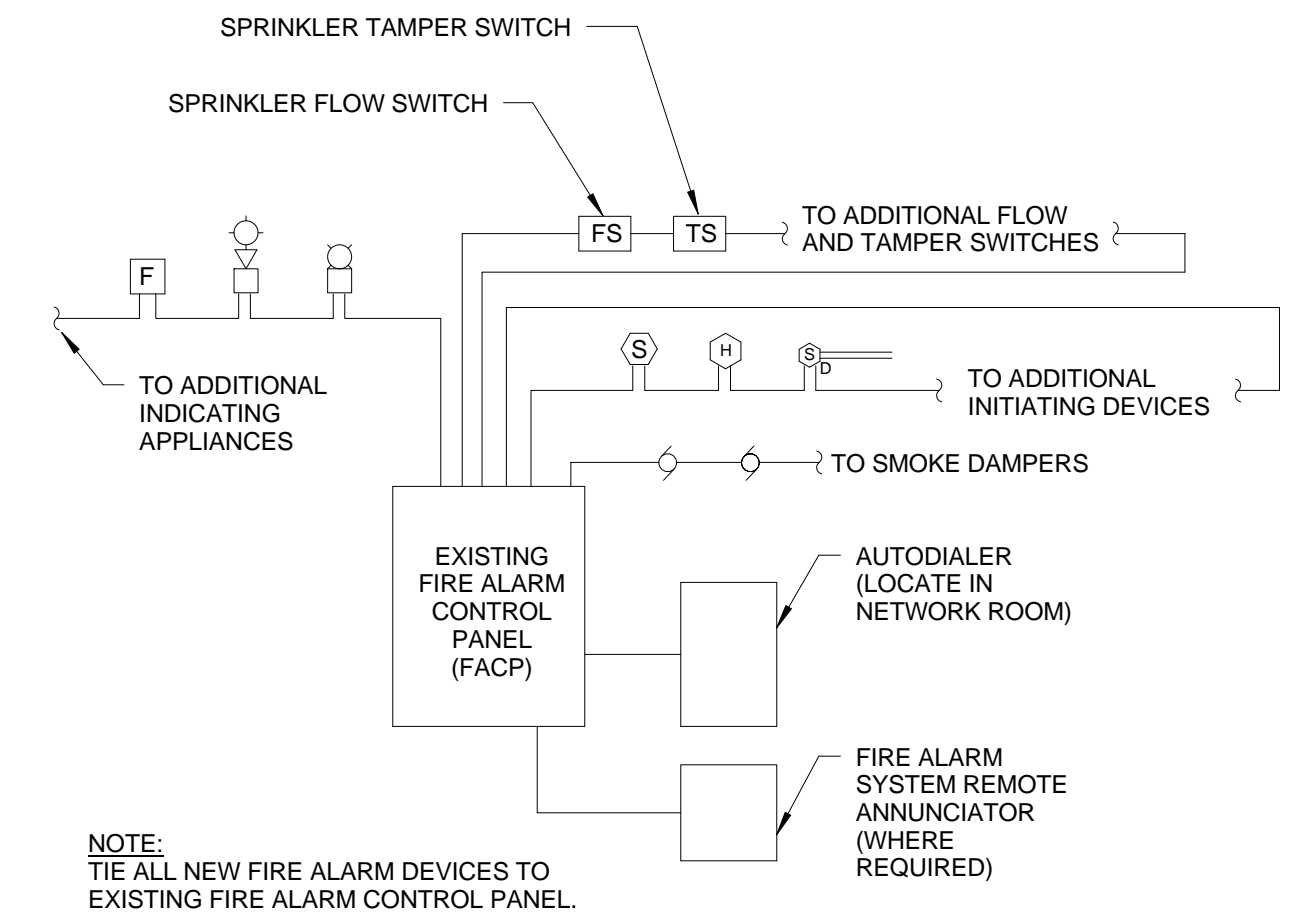
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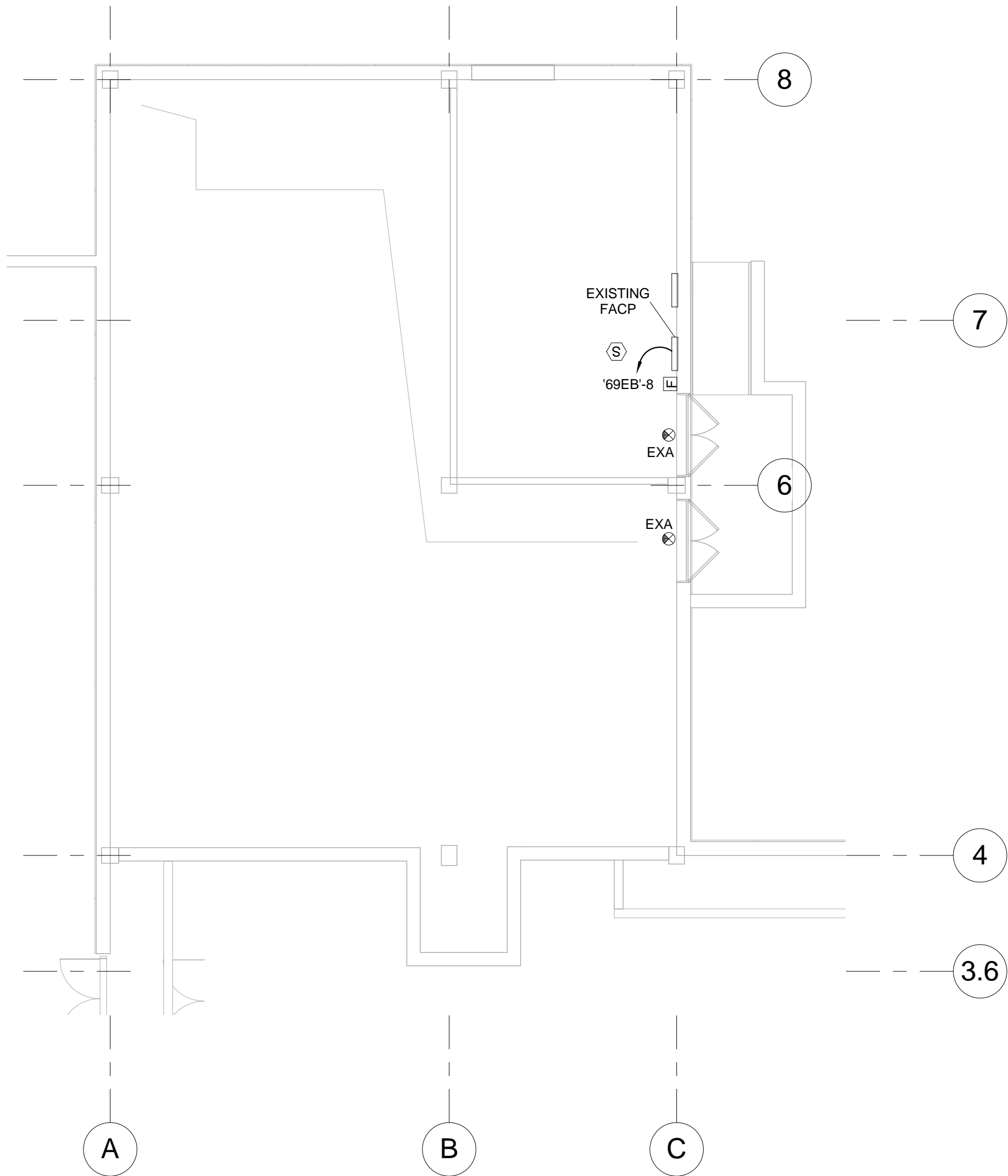
BASEMENT FIRE ALARM & LIFE SAFETY PLAN NOTES:

1. CIRCUIT ALL EXIT SIGNS ON EMERGENCY LIGHTING CIRCUIT SERVING THE SAME AREA AHEAD OF ANY SWITCHING.
2. A CORRIDOR, ROOM, OR ADJACENT SPACE WITH TWO OR MORE VISIBLE NOTIFICATION APPLIANCES WITHIN THE FIELD OF VIEW SHALL FLASH IN SYNCHRONIZATION.
3. TIE ALL NEW FIRE ALARM DEVICES INTO EXISTING FIRE ALARM PANEL.

FIRE ALARM LEGEND	
SYMBOL	DESCRIPTION
	FIRE ALARM HORN/STROBE LIGHT-WALL MOUNTED SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80" AND NOT GREATER THAN 96" AFF.
	FIRE ALARM STROBE LIGHT-WALL MOUNTED SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80" AND NOT GREATER THAN 96" AFF.
	FIRE ALARM STROBE LIGHT-CEILING MOUNTED SUCH THAT THE ENTIRE LENS IS NOT GREATER THAN 10'-0" AFF.
	FIRE ALARM HORN/STROBE LIGHT-CEILING MOUNTED SUCH THAT THE ENTIRE LENS IS NOT GREATER THAN 10'-0" AFF.
	MANUAL FIRE ALARM PULL STATION TO BE LOCATED WITHIN 5'-0" OF THE EXIT DOORWAY OPENING. MIN. 42" AFF. MAX. 48" AFF.
	FIRE ALARM CONTROL PANEL
	FIRE ALARM ANNUNCIATOR
	SMOKE DETECTOR
	HEAT DETECTOR
	SMOKE DUCT DETECTOR
	FLOW SWITCH
	TAMPER SWITCH



2 FIRE ALARM RISER DETAIL  
N.T.S.



1 BASEMENT FIRE ALARM & LIFE SAFETY PLAN  
1/8" = 1'-0"

FULLY SPRINKLERED  
ISSUED FOR BID

CONSULTANTS:										PROJECT MANAGER:		Project Number 3627		Scale As indicated		Drawing Title BASEMENT FIRE ALARM AND LIFE SAFETY PLAN, FIRE ALARM RISER DETAIL AND LEGEND				Project Title RENOVATE BUILDING 69		VA Project Number 542-CSI-203		Office of Facilities Management			
Project Manager BRAY MOONEY CONSULTING		Architect WZG, STRUCTURAL FACILITIES SOLUTIONS		Structural Engineer WZG, STRUCTURAL CONSULTING ENGINEERS		MEP/FP Engineer APOGEE CONSULTING GROUP		Civil Engineer GUIDON DESIGN		Fire Protection Consultant HARRINGTON GROUP		Cost Estimator BRAY MOONEY CONSULTING		Aquatic Consultant ATLANTIC AQUATIC ENGINEERING		Approved: Project Director		Location 1400 Black Horse Hill, Coatesville, PA		Building Number 69		Drawing Number FA101					
410 E. 21 STREET CHESTER, PA, 19013 Tel: (610) 872-3716		2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA, 19406 Tel: (610) 270-0599		180 W. RIDGE PIKE LIMERICK, PA, 19468 Tel: (214) 329-5559		7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC, 27606 Tel: (919) 859-7420		2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 800-6386		7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC, 28277 Tel: (704) 531-9577		410 E. 21 STREET CHESTER, PA, 19013 Tel: (610) 872-3716		1823 DEEP RUN ROAD PIPERSVILLE, PA, 18947 Tel: (215) 766-0409				Date 3/29/13		Checked CGS/WCM		Drawn KLC		Dwg. 82 of 86		 Department of Veterans Affairs	
Revisions		Date																									

1

2

3

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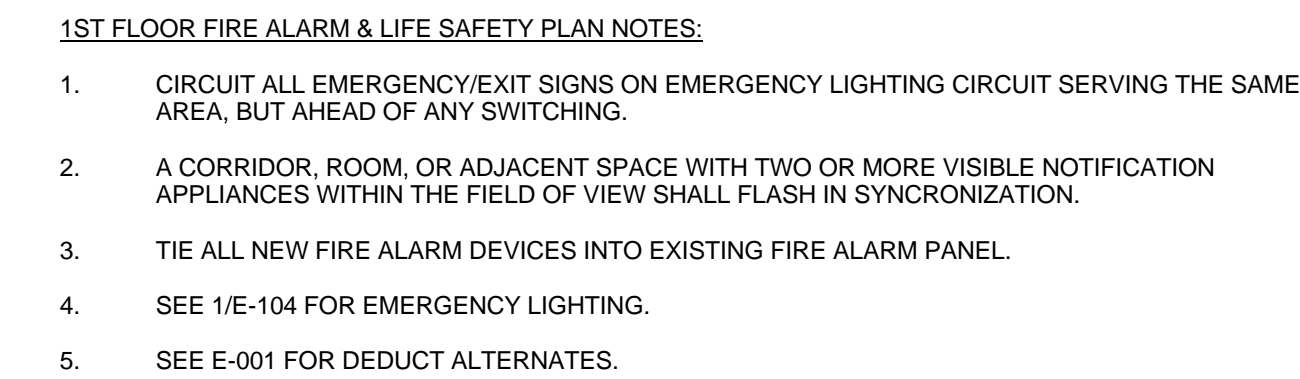
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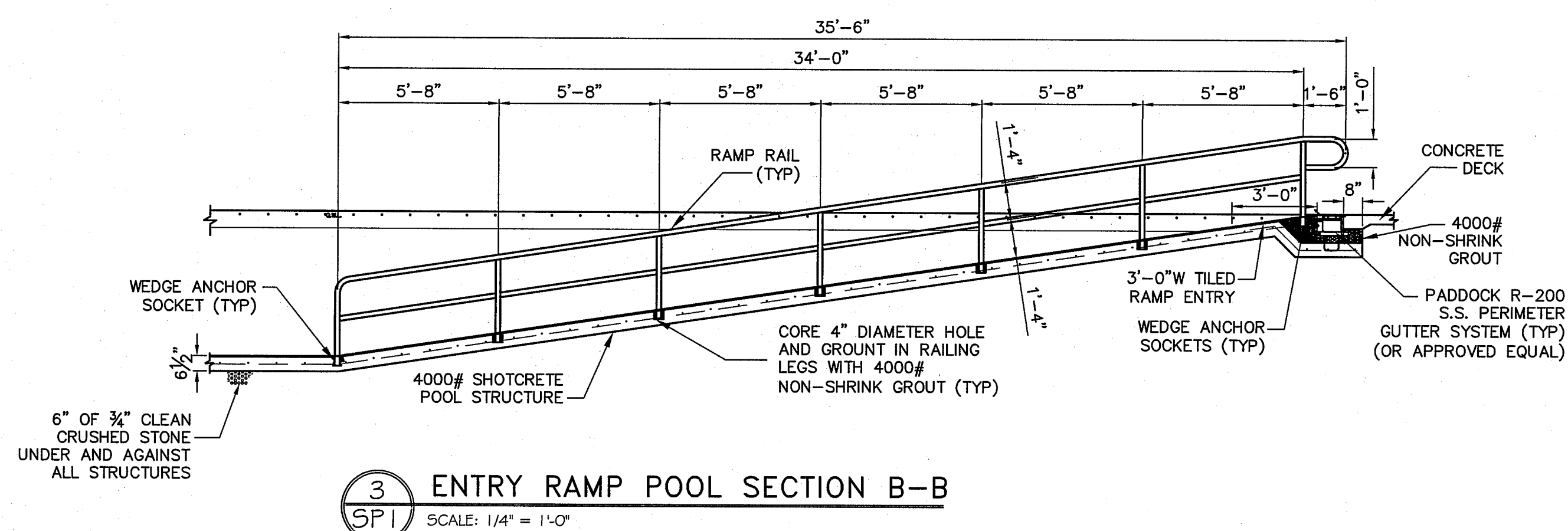
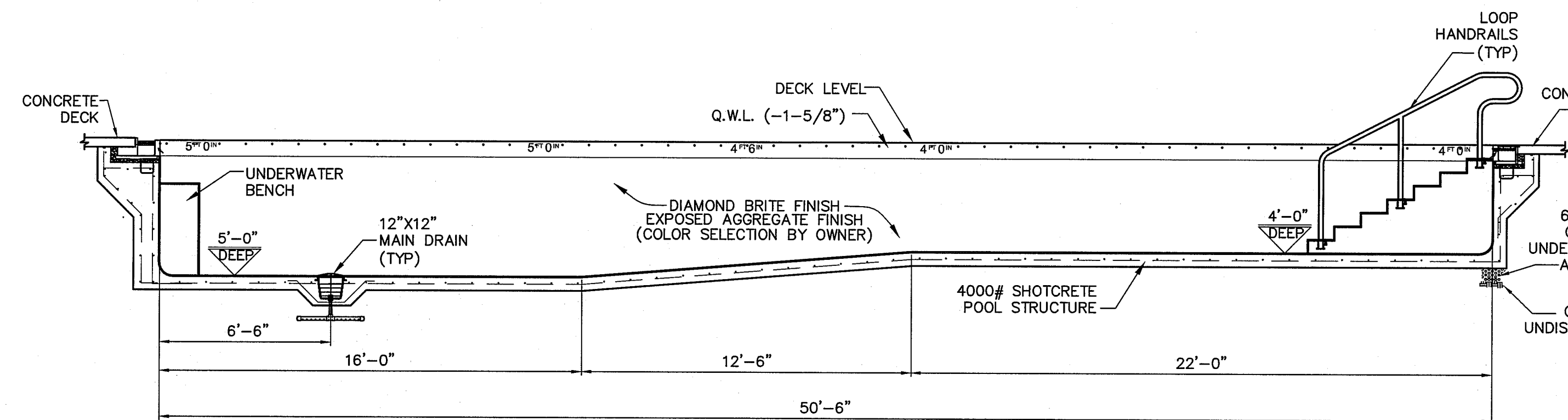
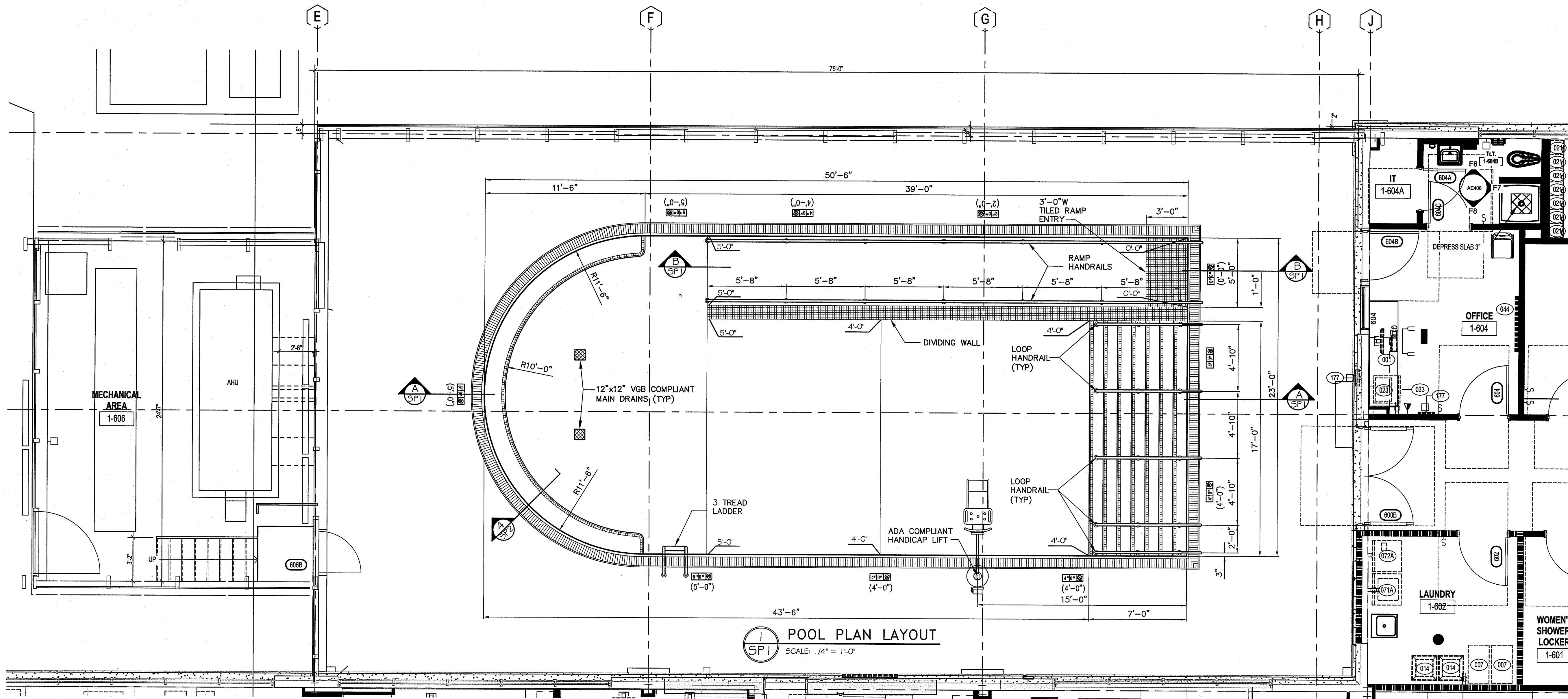




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ISSUED FOR BID

VA FORM 08-6231, OCT 1978





#### POOL HYDRAULIC DATA

AREA	1106 SQ. FT.
PERIMETER	137'-2" LNFT
VOLUME	30,180 GAL.
TURNOVER	6.00 HRS.
FILTER AREA	7.06 SQ. FT.
RECIRC. RATE	84 GPM
APPL. RATE	11.90 GPM/SQ. FT.
BATHER LOAD	92 BATHERS

#### IN-POOL FIXTURES AND RECIRCULATION SYSTEMS - (BASIS OF DESIGN)

NO.	QTY.	CAT. NO.	LABEL	DESCRIPTION
1	36'-0"	PADDOCK R200 W/ EVACUATOR	5.5. PERIMETER GUTTER W/ EVACUATOR	STAINLESS STEEL PERIMETER OVERFLOW GUTTER - 1-5/8" DTW W/ EVACUATOR SYSTEM - IN-POOL SURGE CAPACITY AND INTEGRAL RETURN TUBE.
2	101'-2"	PADDOCK R200	5.5. PERIMETER GUTTER	STAINLESS STEEL PERIMETER OVERFLOW GUTTER - 1-5/8" DTW - IN-POOL SURGE CAPACITY AND INTEGRAL RETURN TUBE.
3	2	LAWSON MLD-560-1212	MAIN DRAINS	V.G.B. COMPLIANT MAIN DRAINS - 12"X12" - 4" CONNECTIONS
4	9	HAYWARD SP-1430	HYDROTHERAPY JETS	HYDROTHERAPY JET FITTINGS
5	9	HAYWARD SP-1022	JET WALL FITTINGS	JET WALL FITTINGS - THREADED
6	9	PENTAIR SP-1419E	JET EYEBALL FITTINGS	JET EYEBALL FITTINGS - 1" ORIFICE

#### DECK AND RACING EQUIPMENT - (BASIS OF DESIGN)

NO.	QTY.	CAT. NO.	LABEL	DESCRIPTION
1	21	S.R. SMITH 44-300	WEDGE ANCHORS	ANCHOR SOCKETS 1.9" BRONZE - LADDERS / HANDRAILS
2	21	S.R. SMITH 44-313	ESTHUEONS	ESTHUEONS - 1.9" - S.S. ROUND
3	1	S.R. SMITH JTB-24-35	3-TREAD LADDER	3 TREAD LADDER - CROSS BRACED - 1.9" O.D. X .065" WALL
4	1	S.R. SMITH 390-0000	HANDICAP LIFT	SPLASH BATTERY OPERATED HANDICAP LIFT W/ ANCHOR - "CALIFORNIA PACKAGE"
5	1	S.R. SMITH LOOP RAIL	LOOP HANDRAIL	LOOP HANDRAIL 1.9" O.D. X .065" WALL - 7'-6" OVERALL
6	2	S.R. SMITH RAMP RAIL	RAMP HANDRAIL	RAMP HANDRAIL 1.9" O.D. X .065" WALL - 35'-6" OVERALL

#### SWIMMING POOL TILE - (BASIS OF DESIGN)

NO.	QTY.	CAT. NO.	LABEL	DESCRIPTION
1	AR	KEYSTONE SERIES	STEP BENCH ACUTY TILE	DAL-TILE KEYSTONE SERIES - 2'X2". PRICE GROUP 3 COLOR TO BE SELECTED BY OWNER / ARCHITECT
1	AR	KEYSTONE SERIES	RAMP ENTRY TILE	DAL-TILE KEYSTONE SERIES - 2'X2". PRICE GROUP 1 OR 2 COLOR TO BE SELECTED BY OWNER / ARCHITECT
3	AR	EDM-SR-6	INLAIS	DEPTH MARKERS 6" X 6" TILE - SKID RESISTANT
4	10	C621500	INLAIS	DEPTH MARKERS 6" X 6" TILE - INTERNATIONAL NO DIVE SYMBOL "NO DIVING" - SKID RESISTANT

#### MAINTENANCE EQUIPMENT - (BASIS OF DESIGN)

NO.	QTY.	CAT. NO.	DESCRIPTION
1	1	RECREONICS 10-215	1-1/2"X18" VACUUM HEAD - BENDERVAC
2	1	RECREONICS 10-414	HEAVY DUTY VACUUM HOSE 1-1/2" X 50'
3	3	RECREONICS 10-3783	1-1/4" O.D. X 8' FIBERGLASS POLES PROVIDE ADAPTER (MODEL # 10-374)
4	1	RECREONICS 10-840	PORTABLE VACUUM SYSTEM PUMP/FILTER - 1.5 H.P. - 120V
5	1	PENTAIR R111342	24" STRAIGHT COMBINATION WALL BRUSH
6	1	PENTAIR R121026	COMMERCIAL SKIMMER NET HEAD
7	1	PENTAIR R191306	8'-16" TELESCOPING POLE
8	1	TAYLOR K-1741C	TEST KIT - PROFESSIONAL COMPLETE
9	2	RECREONICS 10-354	POLE WALL BRACKETS HOLDS TWO POLES

#### POOL SIGNS - (BASIS OF DESIGN)

NO.	QTY.	CAT. NO.	LABEL
1	1	AQUATIC TECHNOLOGY PA2000WS1624E	PA PUBLIC POOL REGULATIONS
2	1	AQUATIC TECHNOLOGY 1001WS1624E	NO LIFEGUARD ON DUTY
3	1	AQUATIC TECHNOLOGY 730WS1210E	POOL CLOSED

#### SAFETY EQUIPMENT - (BASIS OF DESIGN)

NO.	QTY.	CAT. NO.	DESCRIPTION
1	1	RECREONICS 12-044	BULK FIRST AID KIT FOR UP TO 50 PEOPLE
2	1	RECREONICS 12-317	SPINEBOARD w/ STRAPS
3	1	RECREONICS 12-783	HEAD IMMOBILIZER
4	1	RECREONICS 12-448	FIRST AID WOOL BLANKET
5	1	RECREONICS 12-677	VINYL SAFETY APRON
6	1	RECREONICS 12-636	PROTECTIVE GOGGLES

NO.	QTY.	CAT. NO.	DESCRIPTION
7	1	RECREONICS 12-676	PVC SAFETY GLOVES
8	1	RECREONICS 12-252	24" LIFE RING BUOY - WHITE
9	1	RECREONICS 12-261	LIFE RING THROW LINE - 60FT
10	1	RECREONICS 12-257	4-1/4" LIFE RING BUOY HOLDER - S.S.
11	1	PENTAIR R22102G	LIFE HOOK
12	1	PENTAIR LP16	LIFE HOOK POLE - 16FT

#### SWIMMING POOL FILTRATION EQUIPMENT - (BASIS OF DESIGN)

NO.	QTY.	CAT. NO.	LABEL	DESCRIPTION
1	1	PENTAIR TR-140	HI-RATE SAND FILTER	HI-RATE SAND FILTER, TRITON II - 7.06 SQ FT FILTER AREA
2	1	PENTAIR 261050	MULTI-PORT VALVE	MULTI-PORT VALVE - HI-FLOW - 2IN CONNECTIONS
3	1	PENTAIR WFK-6	RECIRCULATION PUMP	PENTAIR WHISPERLO PUMP - 2 H.P. - 84 GPM @ 65 TDH, 208-230V 60V, 3 PH
4	1	PENTAIR WFK-12	JET PUMP	PENTAIR WHISPERLO PUMP - 3 H.P. - 135 GPM @ 55 TDH, 208-230V 60V, 3 PH
5	3	WKA 9767053	PRESSURE GAUGE	2-1/2" DIA, 0-60 PSI, RANGE - LIQUID FILLED
6	2	WKA 9767210	VACUUM GAUGE	2-1/2" DIA, 30"-0-30PSI RANGE - LIQUID FILLED
7	1	BLUE-WHITE RT-20056-GPM-1	DIGITAL FLOW METER	BLUE-WHITE - DIGITAL 2" FLOWMETER W/ READOUT
8	1	WARRICK/ ASCO	WATER LEVEL CONTROL SYSTEM	16VMCI A121010-10 RELAY, 1 - 3GBB1 PROBE HOLDER, 3 - RX G4 ELECTRODES; 1-1" ASCO MODEL # B221 G005 SLOW CLOSING SOLENOID VALVE

#### SWIMMING POOL CHEMICAL FEED EQUIPMENT - (BASIS OF DESIGN)

NO.	QTY.	CAT. NO.	LABEL	DESCRIPTION
1	1	HAYWARD CAT 2000	CHEMICAL CONTROLLER	AUTOMATED CHEMICAL CONTROLLER - PH, ORP, AND FLOW MONITORING - 120V
2	1	CHEMTAINER TC2030A	CHLORINE BULK TANK	55 GALLON CHLORINE BULK TANK
3	1	STENNER 45M4	CHLORINE PUMP	PERISTALTIC CHEMICAL FEED PUMP, SINGLE HEAD FEEDER, ADJUSTABLE FEED RATE
4	1	STENNER 45M4	ACID PUMP	PERISTALTIC CHEMICAL FEED PUMP, SINGLE HEAD FEEDER, ADJUSTABLE FEED RATE
5	1	EMPEROR AQUATICS CLP4390AG-2FN	U.V. SYSTEM	EMPEROR AQUATICS SAFEGUARD LOW PRESSURE UV SYSTEM CLP4390AG-2FN

#### HEAT SYSTEMS - (BASIS OF DESIGN)

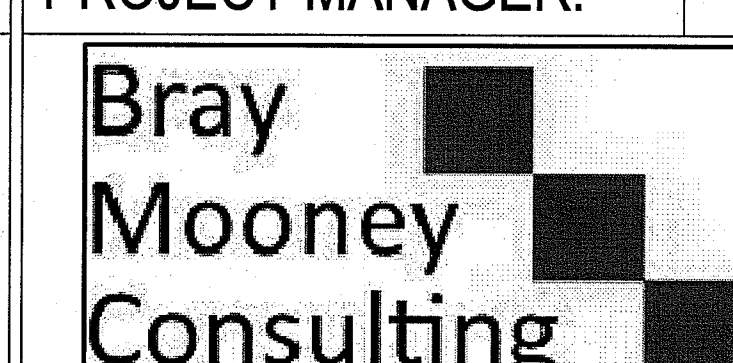
NO.	QTY.	CAT. NO.	LABEL	DESCRIPTION
1	1	BY OTHERS	POOL HEAT EXCHANGER	EQUIPMENT PROVIDED BY OTHERS. COORDINATE WITH M.C.
2	2	TRERICE 11A0650	IN-LINE THERMOMETER	9" THERMOMETER W/ 3.5" TEST WELL

NOT FOR CONSTRUCTION FULLY SPRINKLERED  
ISSUED FOR BID

#### CONSULTANTS:

Project Manager	Architect	Structural Engineer	ME/PE/PP Engineer	Civil Engineer	Fire Protection Consultant	Cost Estimator	Aquatic Consultant
BRAY MOONEY CONSULTING	ARRAY HEALTHCARE SOLUTIONS	ZG, STRUCTURAL ENGINEERS	APOGEE CONSULTING GROUP	GUIDON DESIGN	HARRINGTON GROUP	BRAY MOONEY CONSULTING	ATLANTIC AQUATIC ENGINEERING
410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716	2520 RENAISSANCE BLVD., SUITE 110 KING OF PRUSSIA, PA 19406 Tel: (610) 270-0599	180 W. RIDGE PIKE LIMERICK, PA 19408 Tel: (610) 326-6599	7330 CHAPEL HILL ROAD, SUITE 202 RALEIGH, NC 27606 Tel: (919) 858-7420	2453 N DELAWARE STREET INDIANAPOLIS, IN 46205 Tel: (317) 500-6386	7508 E. INDEPENDENCE BLVD., SUITE 116 CHARLOTTE, NC 28277 Tel: (704) 531-8077	410 E. 21 STREET CHESTER, PA 19013 Tel: (610) 872-3716	1823 DEEP RUN ROAD PIPERSVILLE, PA 18947 Tel: (215) 786-0409

#### PROJECT MANAGER:



Project Number 3627  
Scale As indicated

Drawing Title  
POOL LAYOUT, SECTIONS, AND EQUIPMENT LISTING

Approved: Project Director

Project Title  
RENOVATE BUILDING 69

Location  
1400 Black Horse Hill, Coatesville, PA

Date 03-29-13  
Checked JDB  
Drawn ML

Dwg. of SP1

VA Project Number  
542-CSI-203

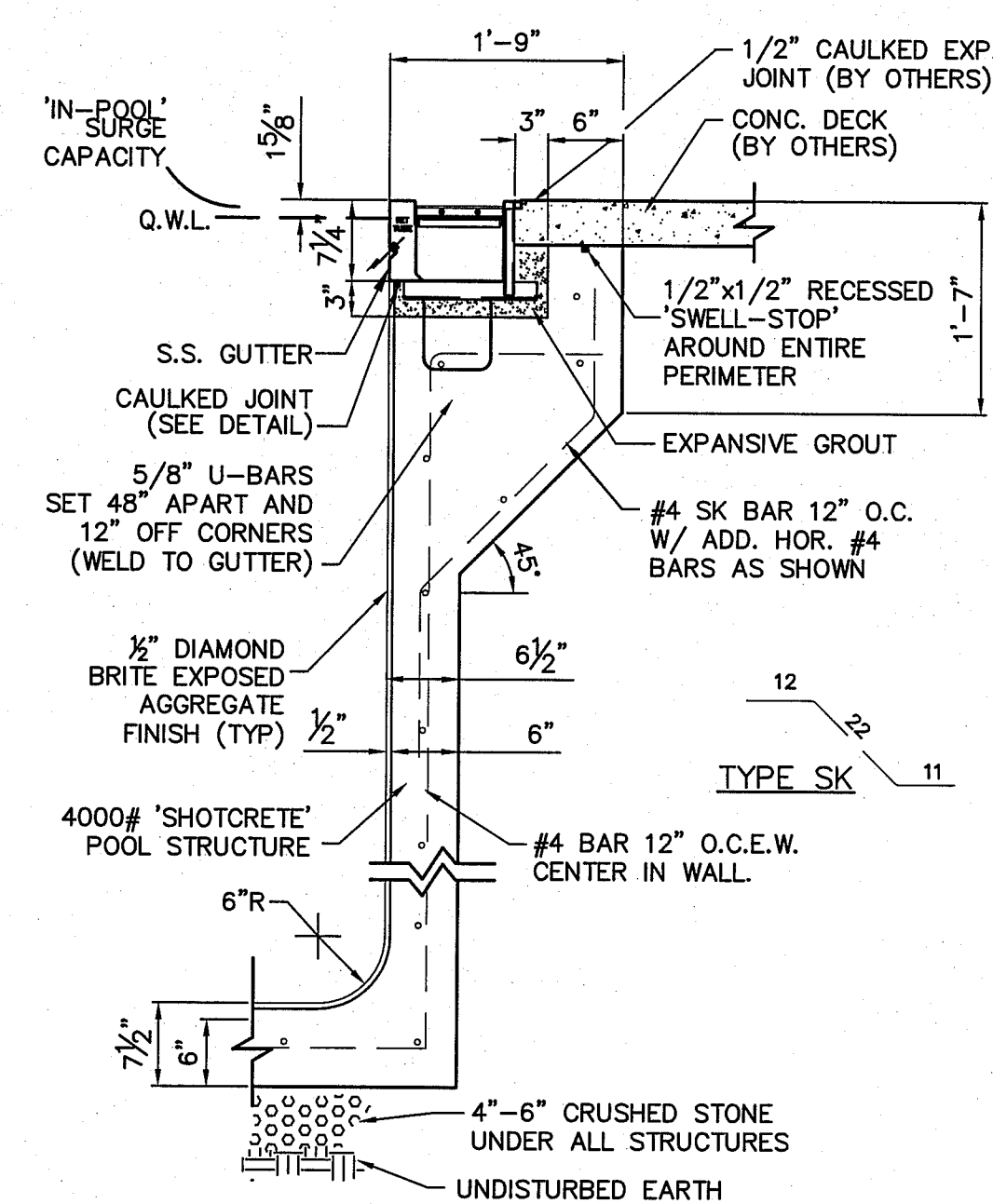
Building Number  
69

Drawing Number  
SP1

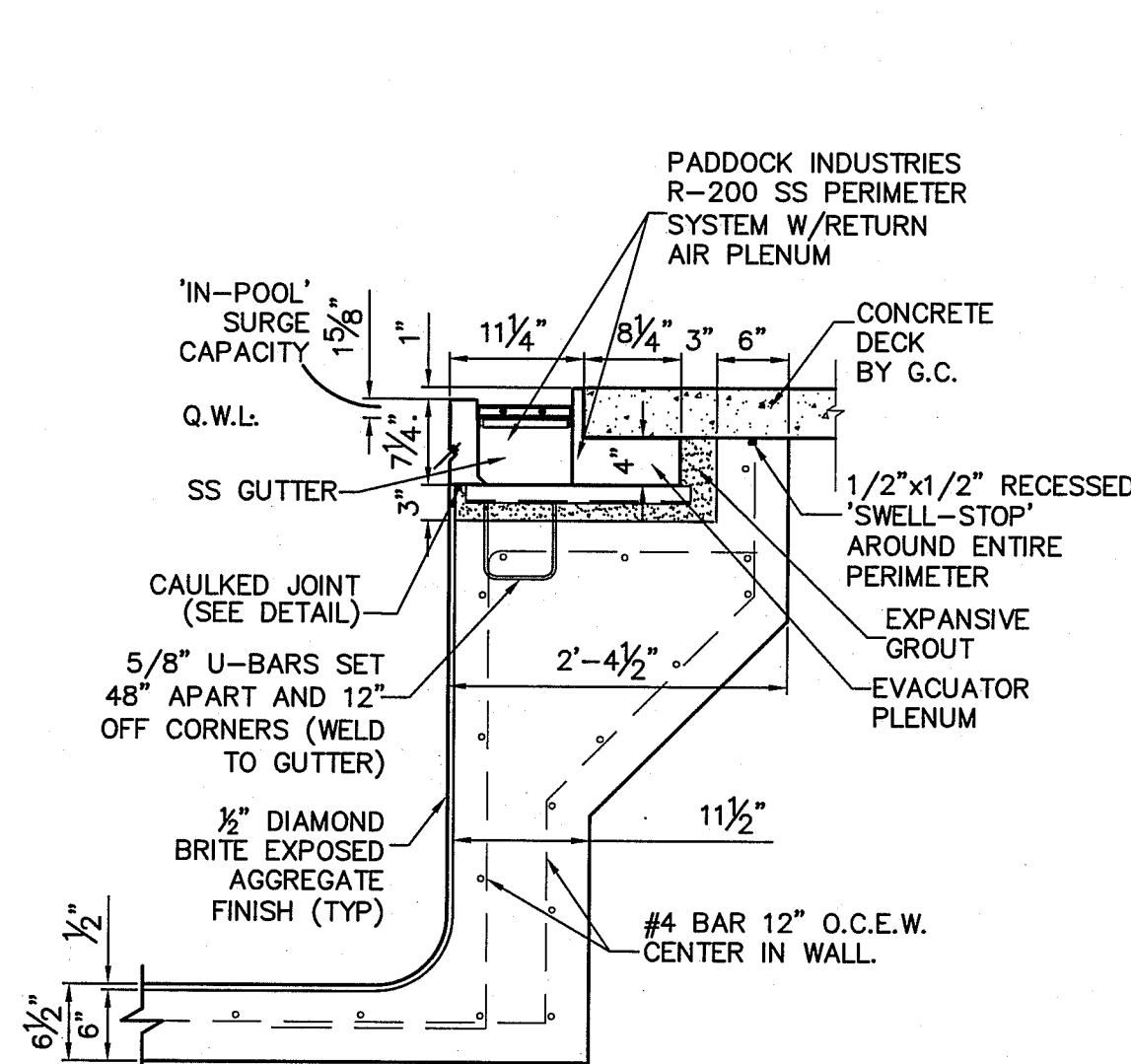
Office of  
Facilities  
Management



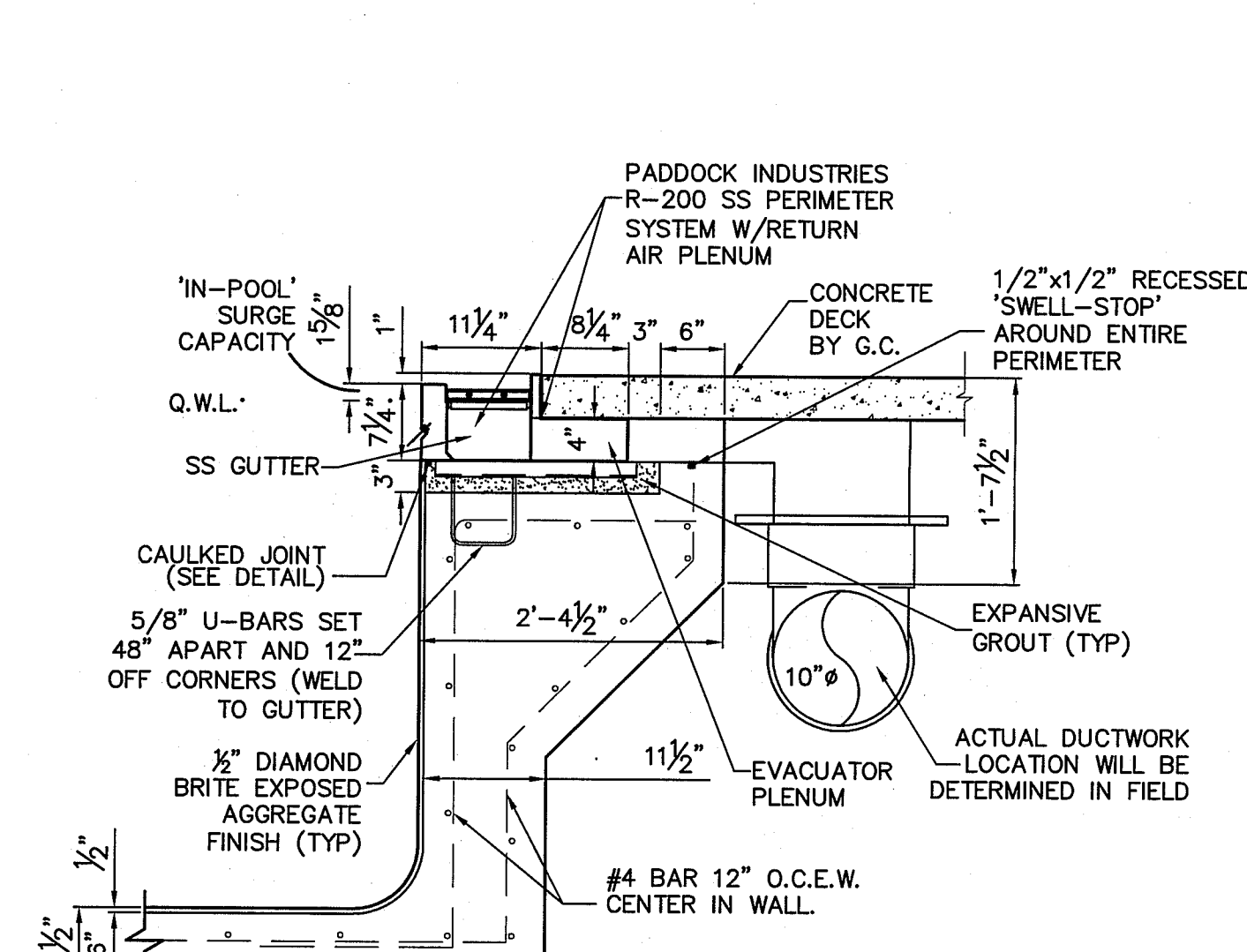




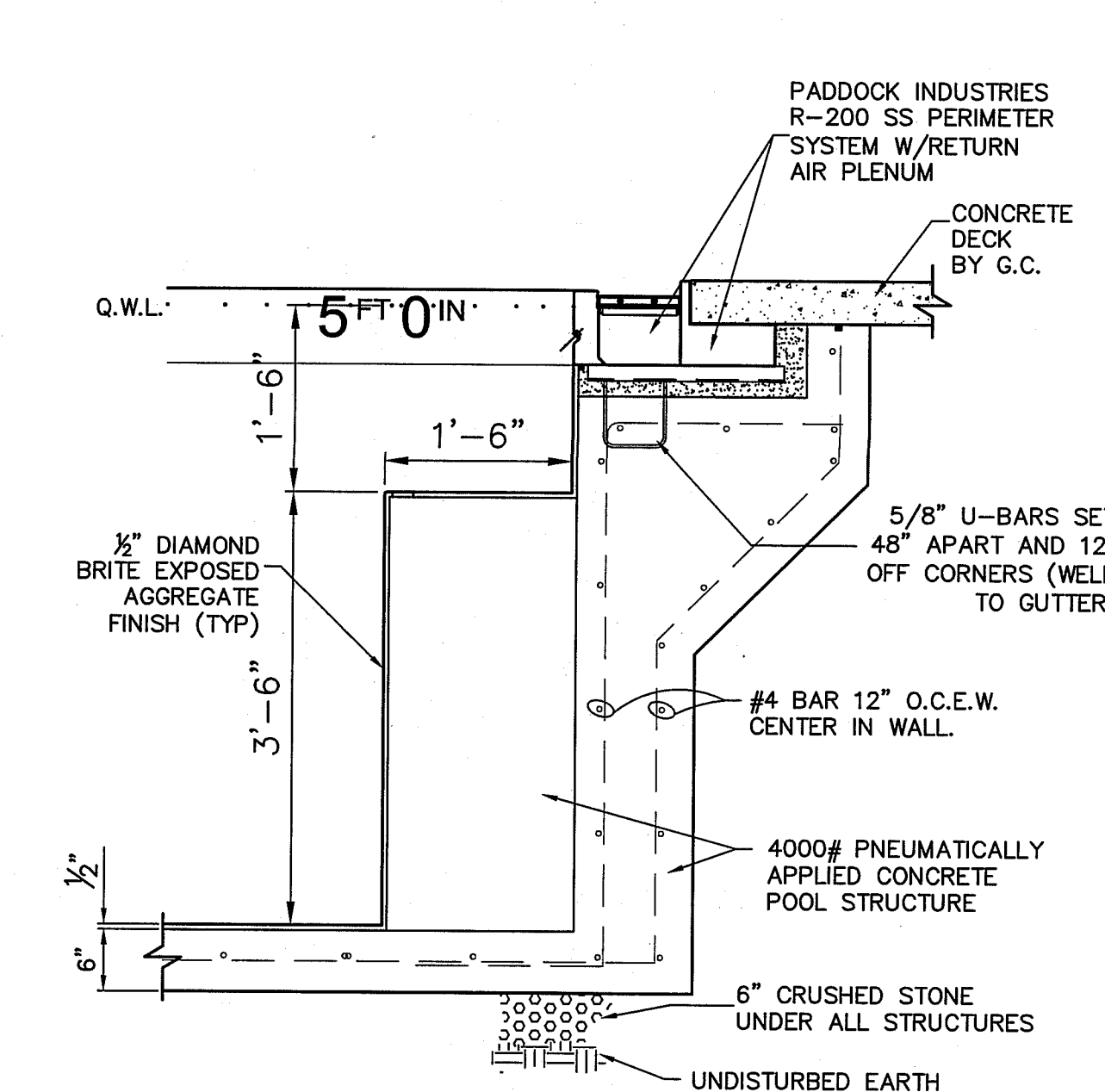
**1 WALL SECTION DETAIL**  
SCALE: 3/4\"/>



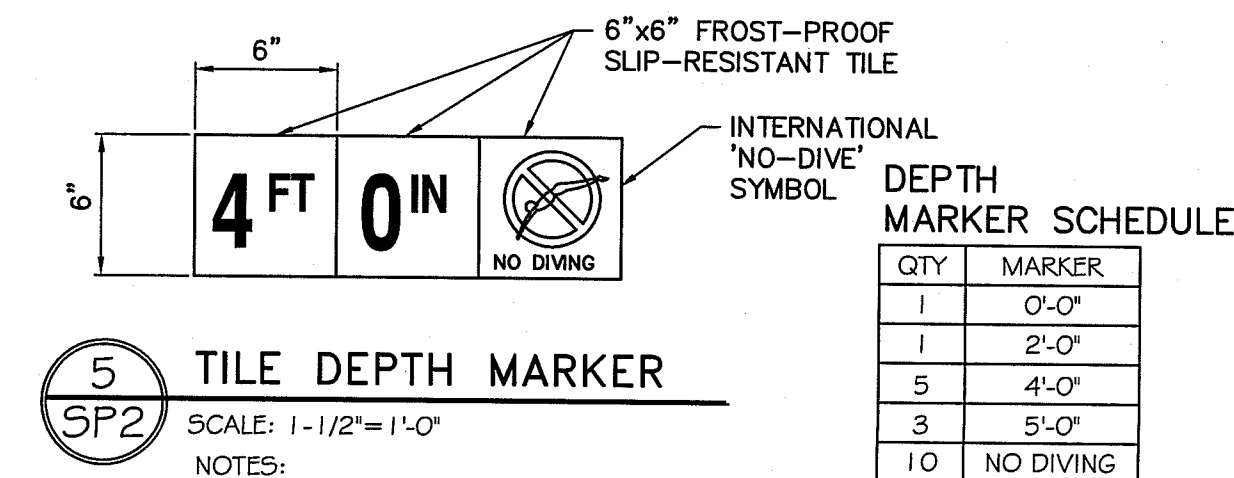
**2 POOL WALL DETAIL @ EVACUATOR GUTTER**  
SCALE: 3/4\"/>



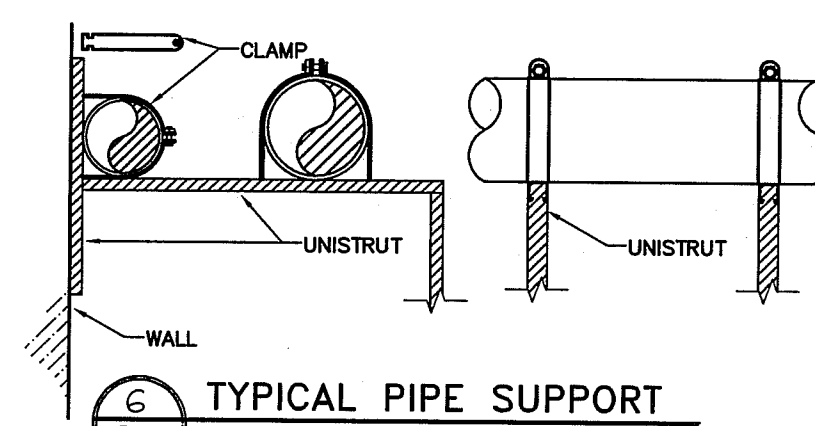
**3 POOL WALL DETAIL @ EVACUATOR GUTTER CONVERTER**  
SCALE: 3/4\"/>



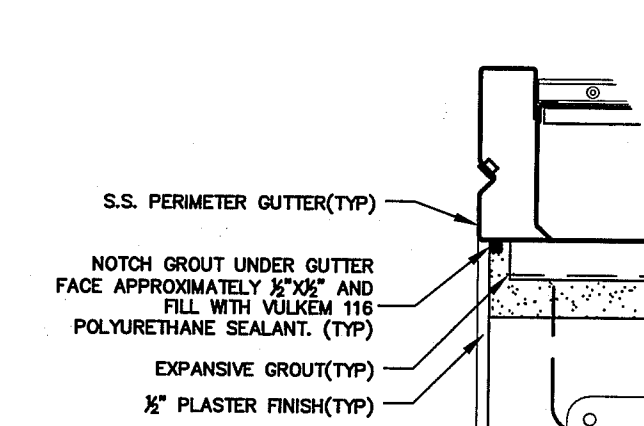
**4 BENCH WALL SECTION DETAIL**  
SCALE: 3/4\"/>



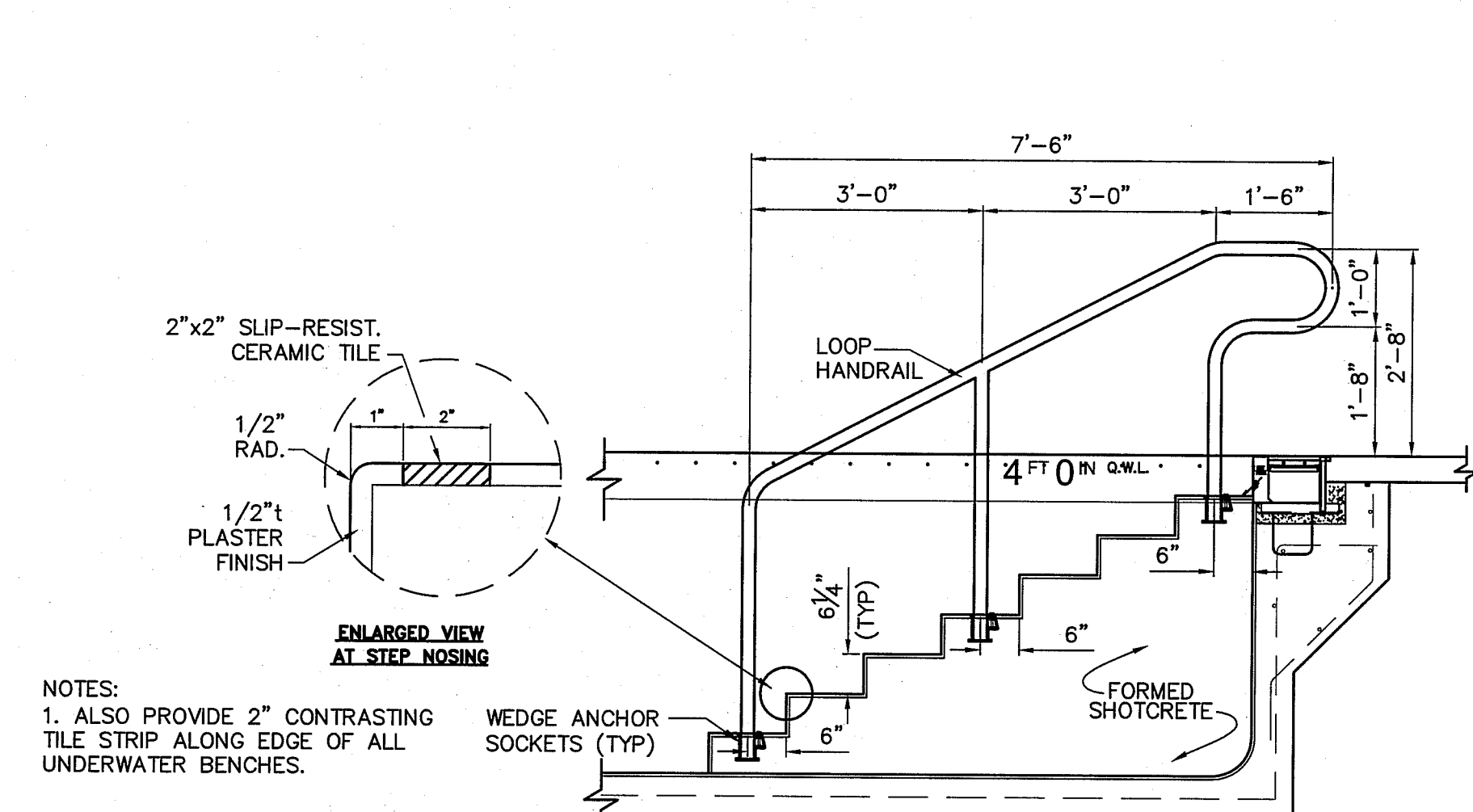
**5 TILE DEPTH MARKER**  
SCALE: 1-1/2\"/>



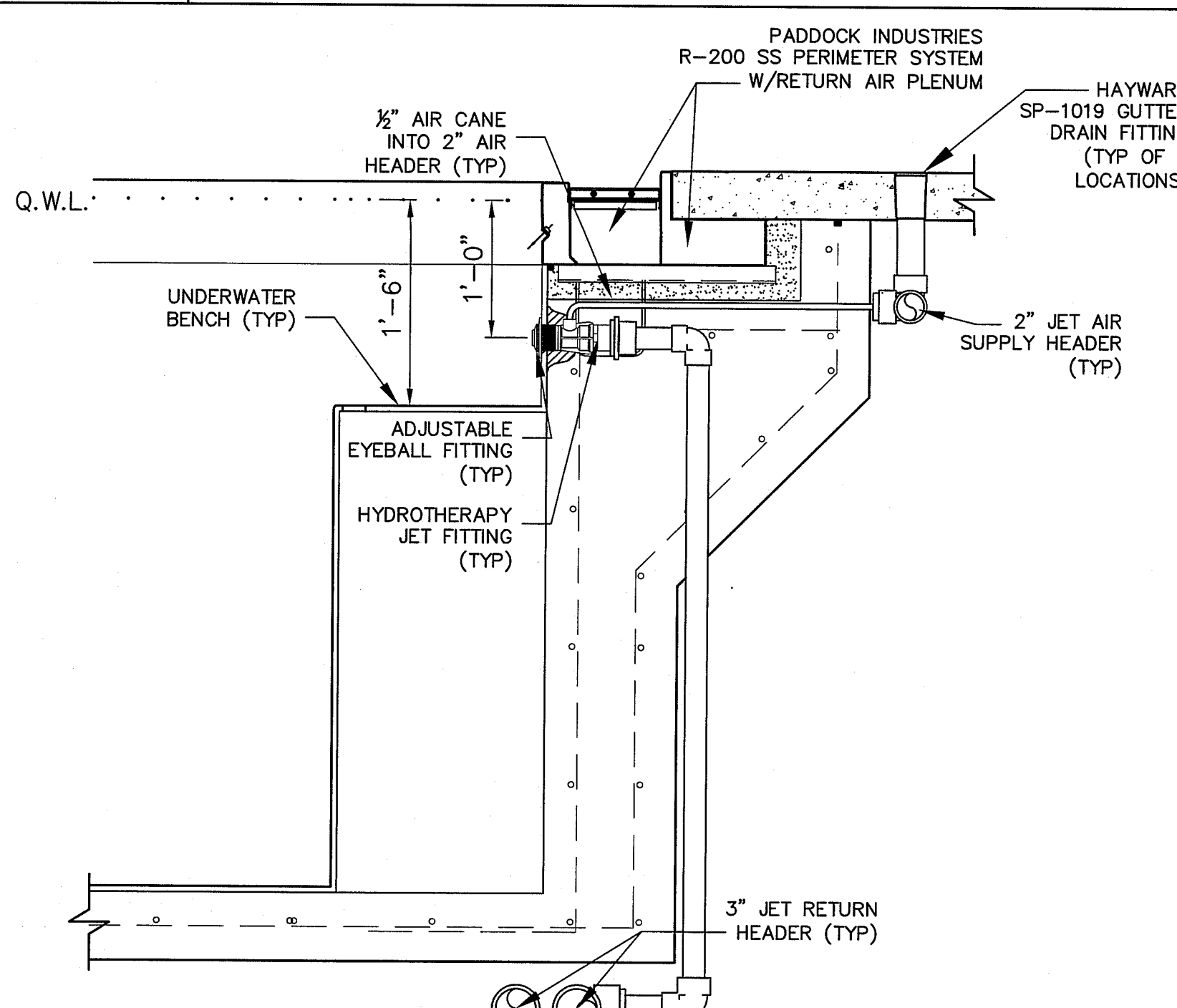
**6 TYPICAL PIPE SUPPORT**  
SCALE: NO SCALE



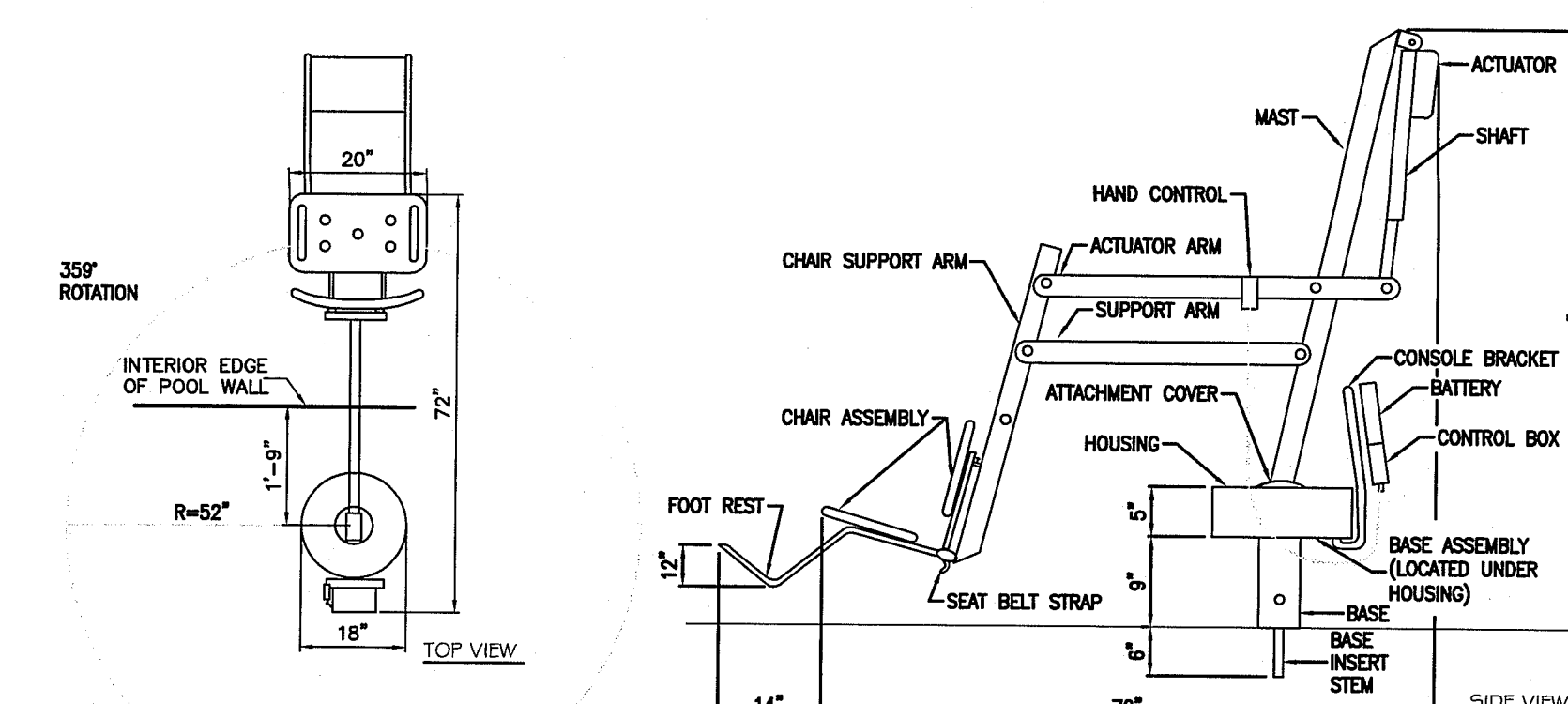
**7 GUTTER CAULK JOINT DETAIL**  
SCALE: 1-1/2\"/>



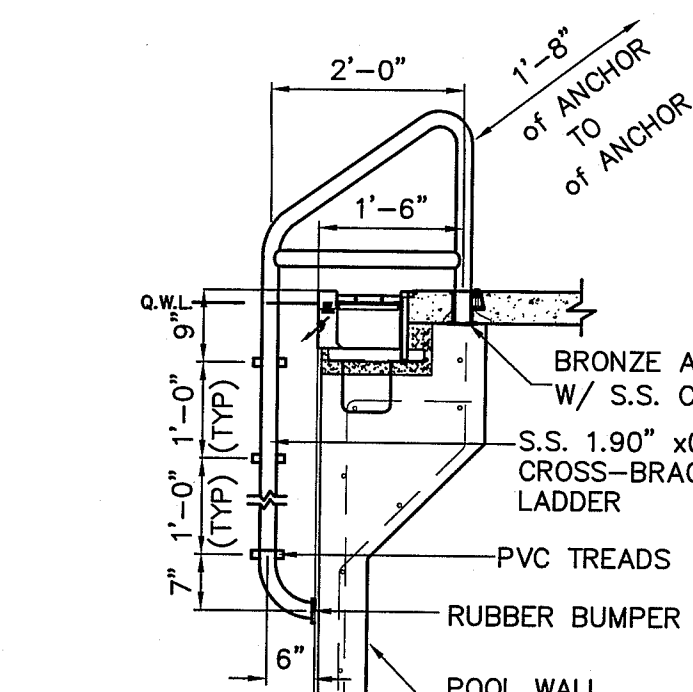
**8 STEP/HANDRAIL SECTION**  
SCALE: 1/2\"/>



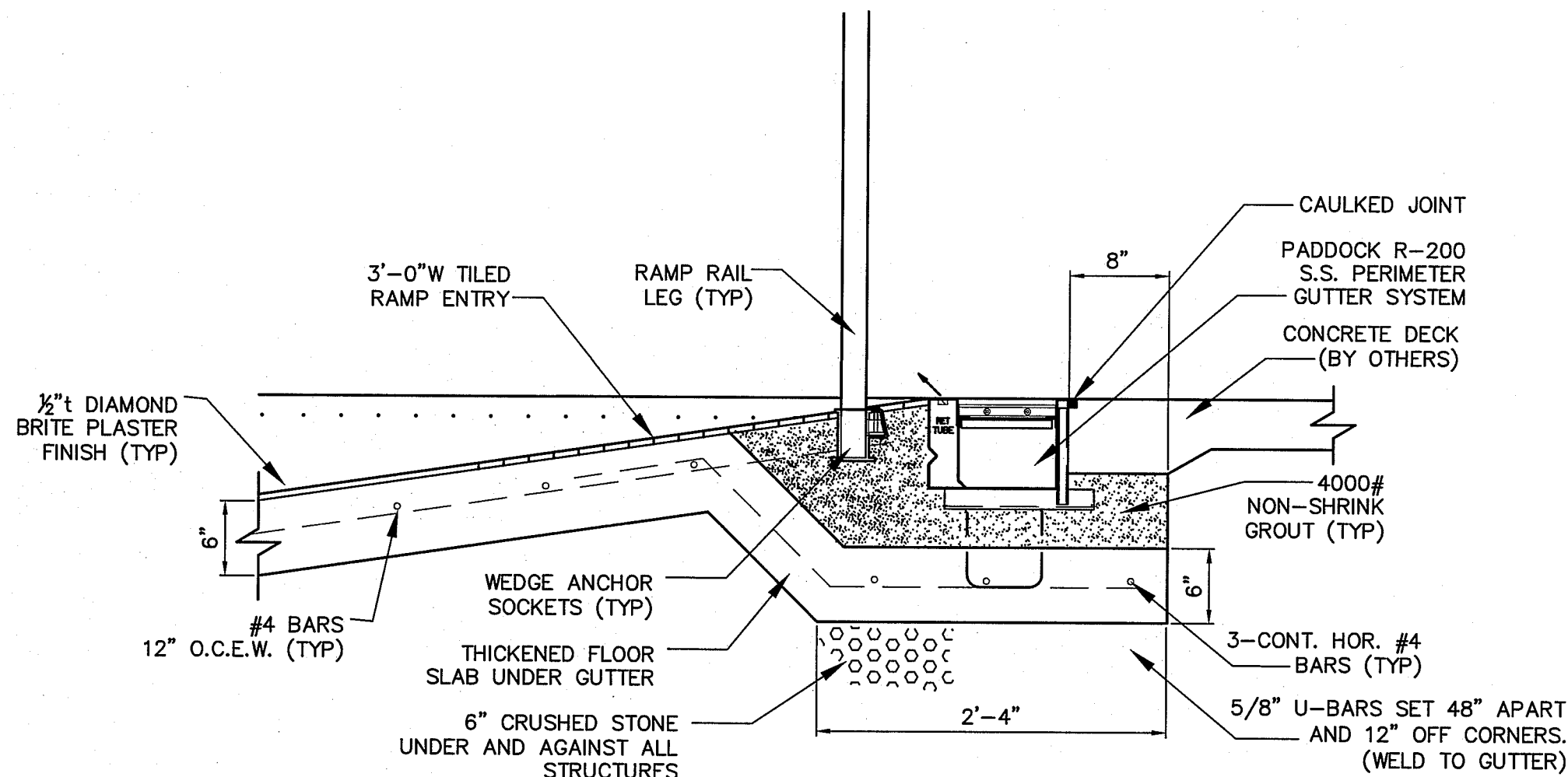
**9 JET DETAIL**  
SCALE: 1\"/>



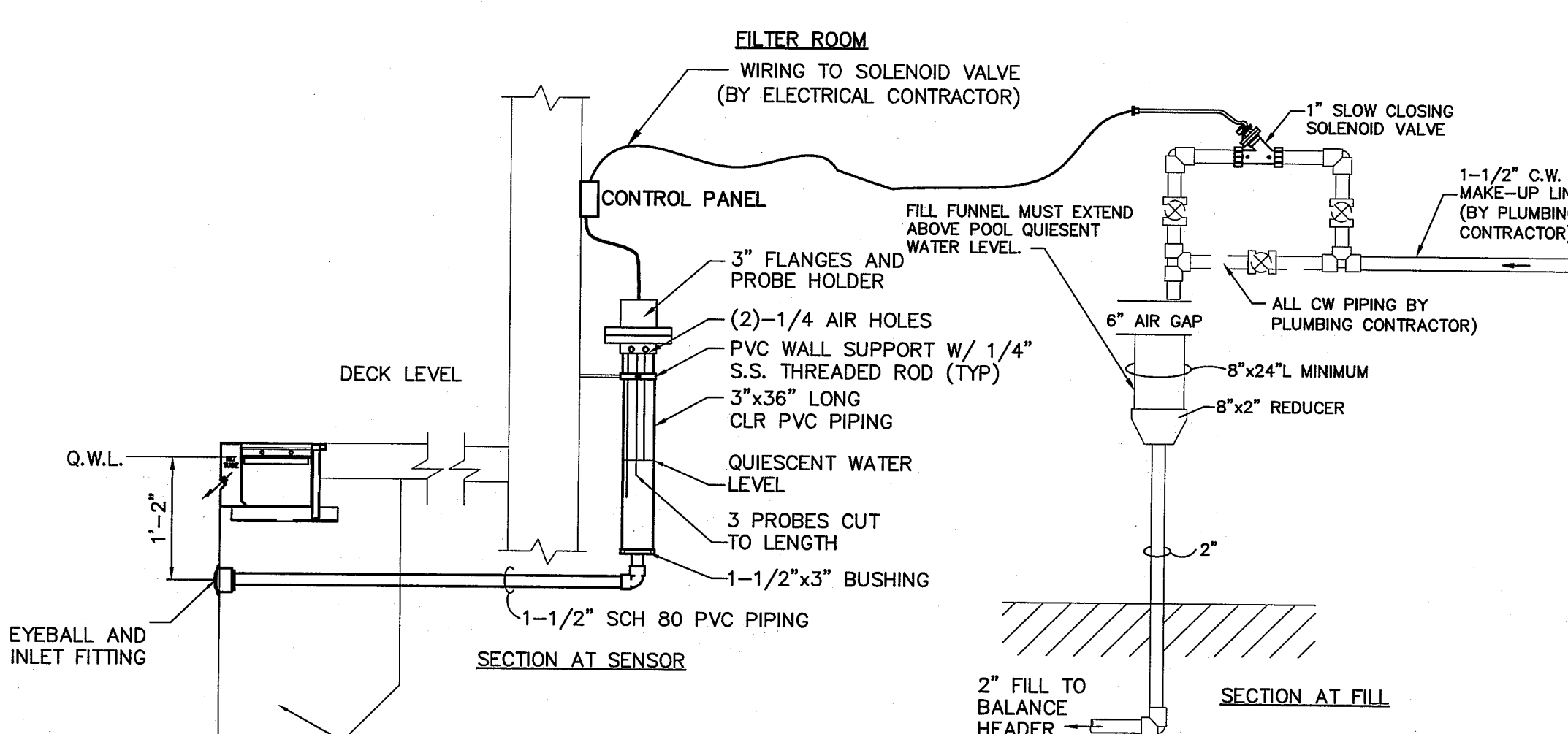
**10 SPLASH SEMI-PORTABLE POOL LIFT**  
SCALE: 3/8\"/>



**11 CROSS-BRACED LADDER DETAIL**  
SCALE: 1/2\"/>



**12 WALL DETAIL AT RAMP DEPTH ENTRY**  
SCALE: 1\"/>



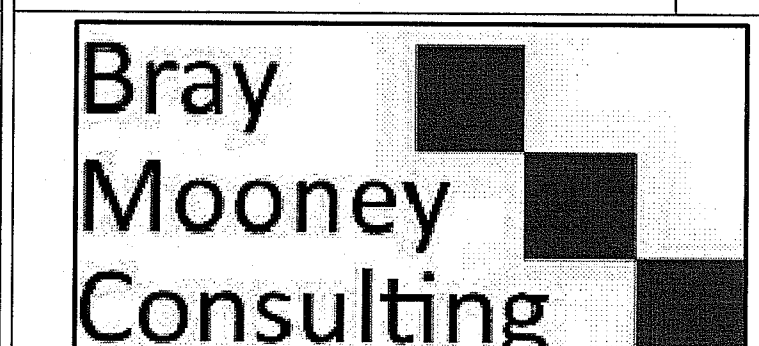
**13 WATER LEVEL CONTROL DIAGRAM**  
SCALE: 3/4\"/>

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ISSUED FOR BID

**CONSULTANTS:**

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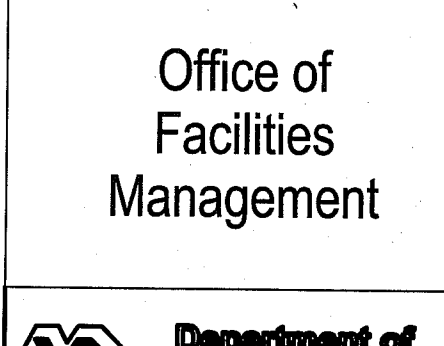
**PROJECT MANAGER:**



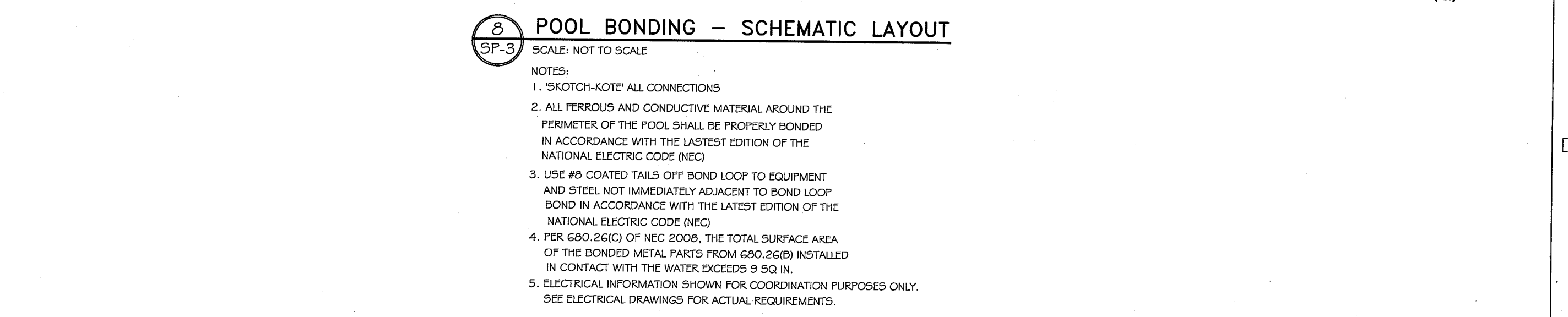
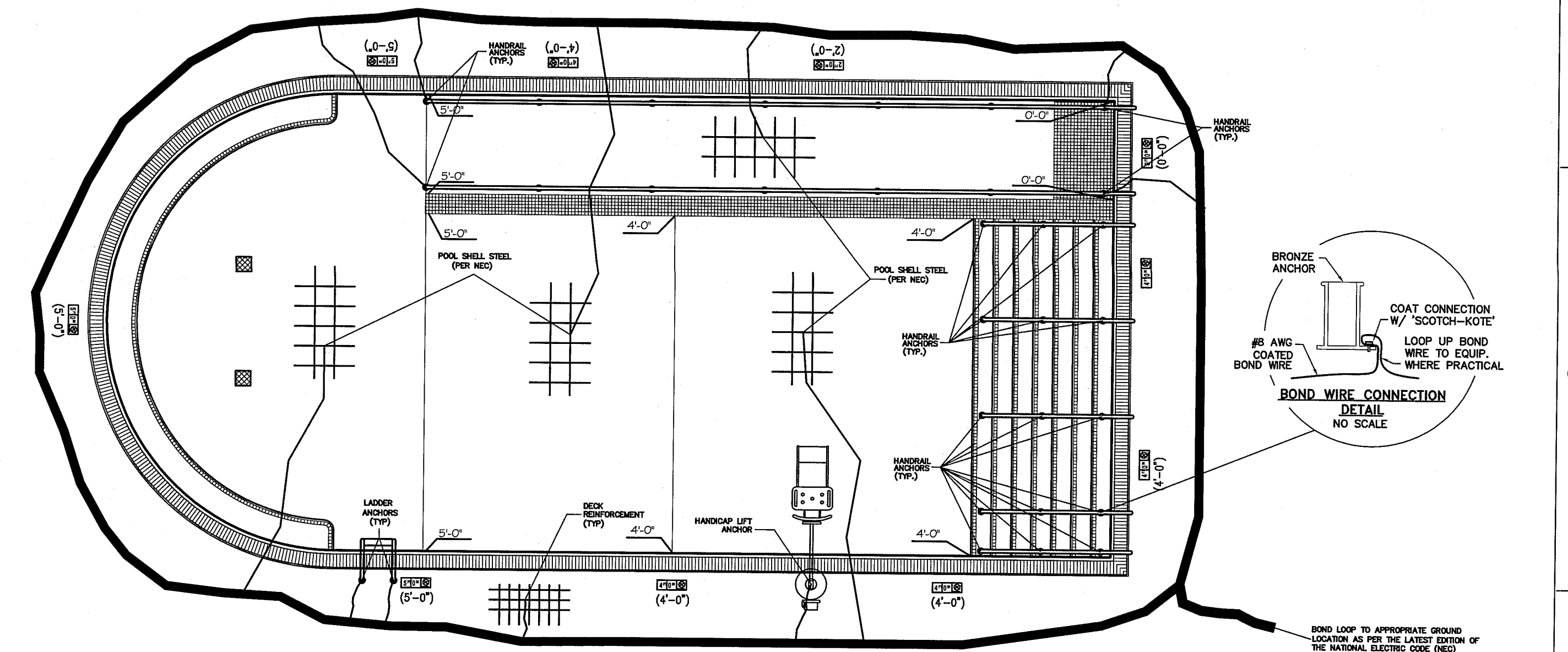
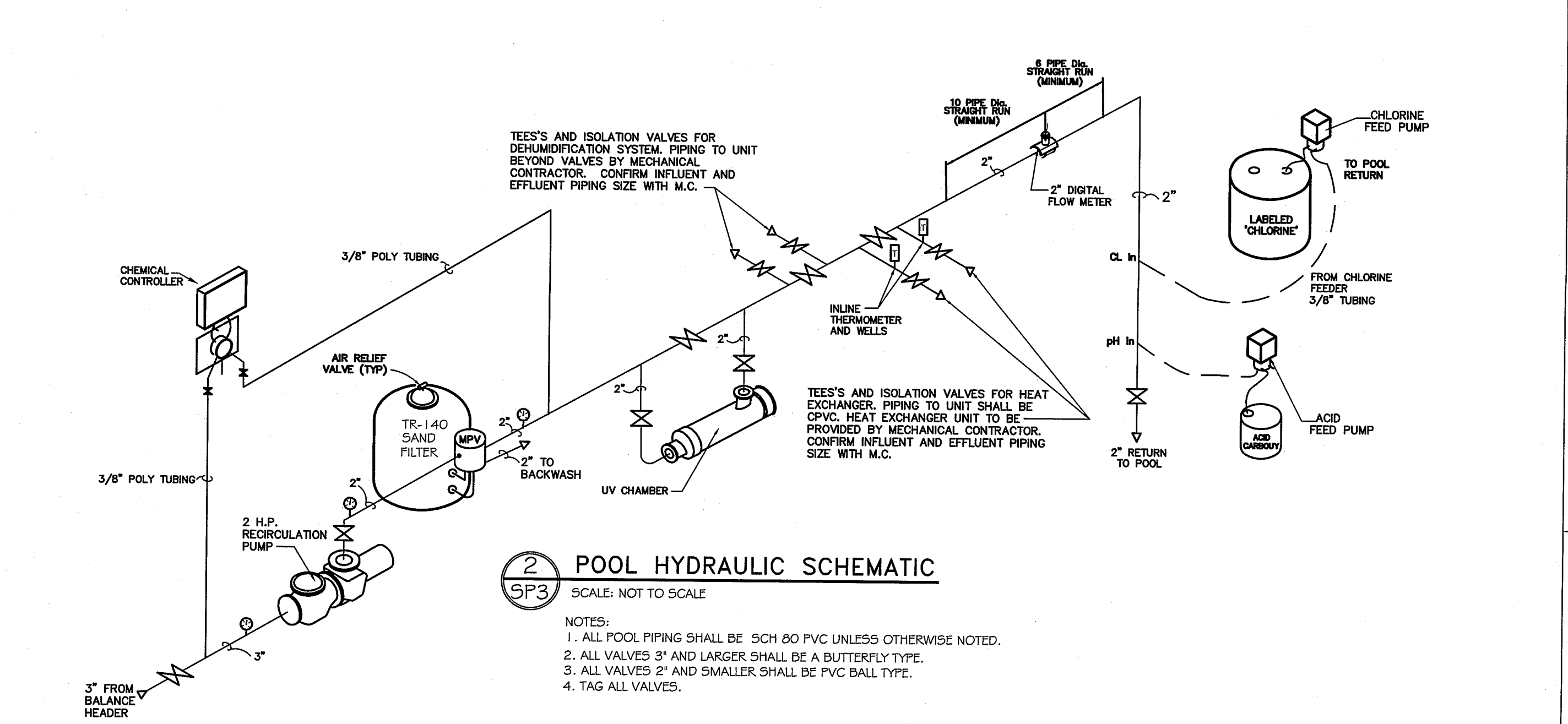
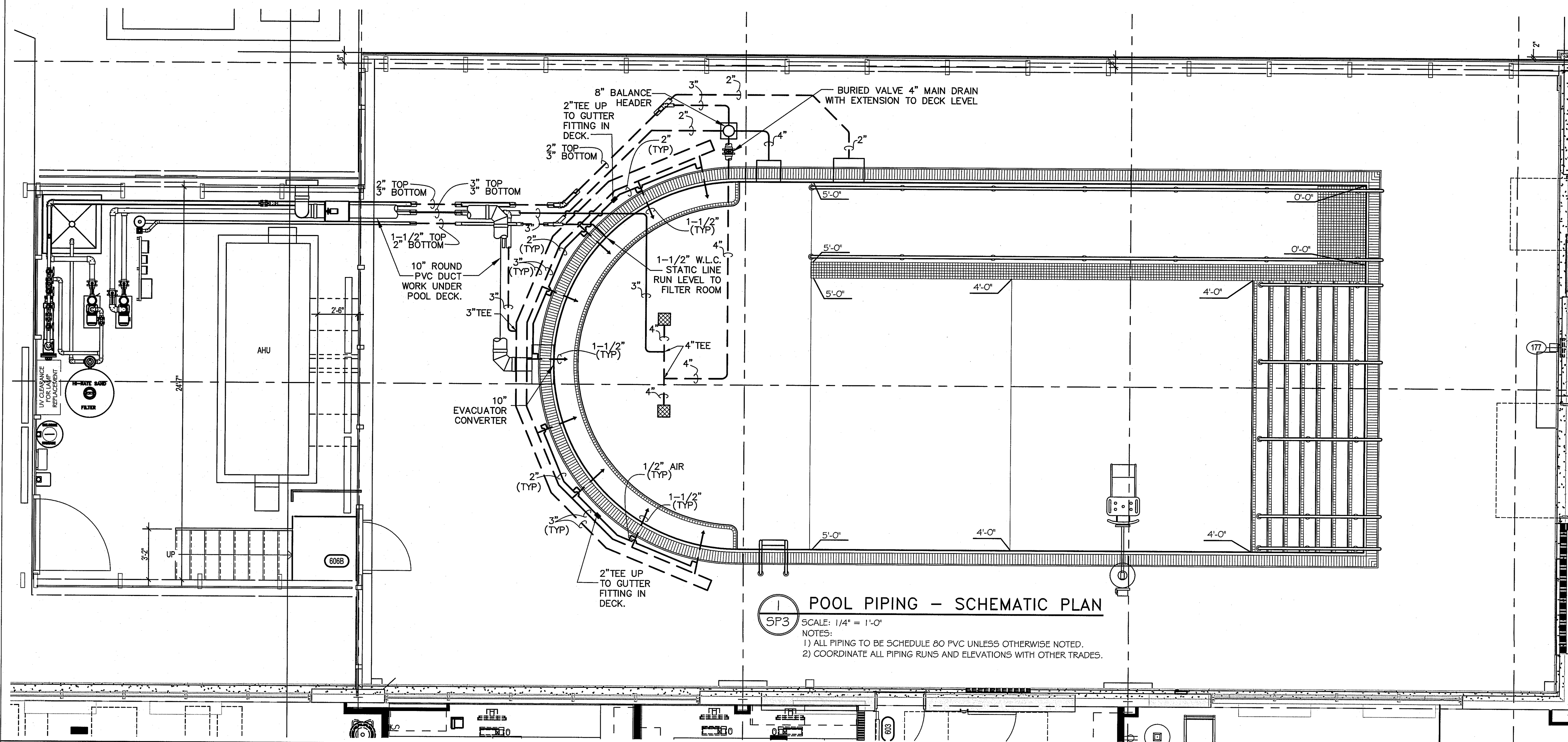
Project Number 3627  
Scale As indicated

<b>Drawing Title</b> POOL EQUIPMENT DETAILS	<b>Project Title</b> RENOVATE BUILDING 69
<b>Approved: Project Director</b>	<b>Location</b> 1400 Black Horse Hill, Coatesville, PA
<b>Date</b> 03-29-13	<b>Checked</b> JDB
<b>Drawn</b> ML	<b>Dwg. of</b> SP2

<b>VA Project Number</b> 542-CSI-203	<b>Building Number</b> 69
<b>Drawing Number</b> SP2	<b>Dwg. of</b> of

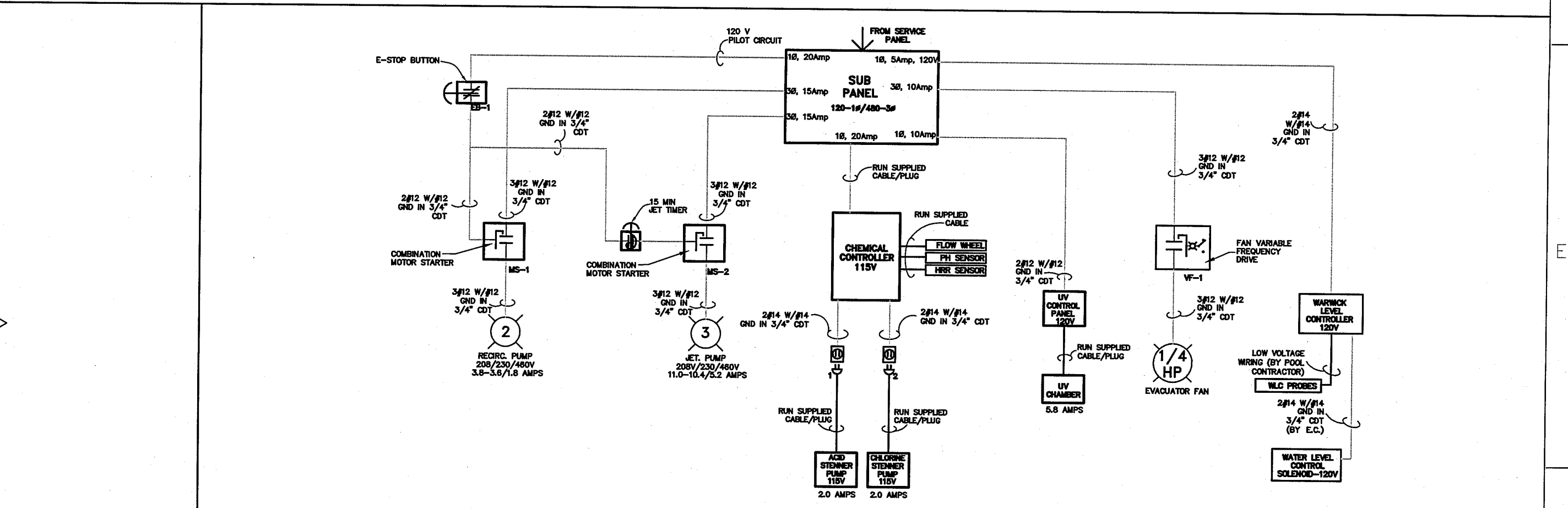
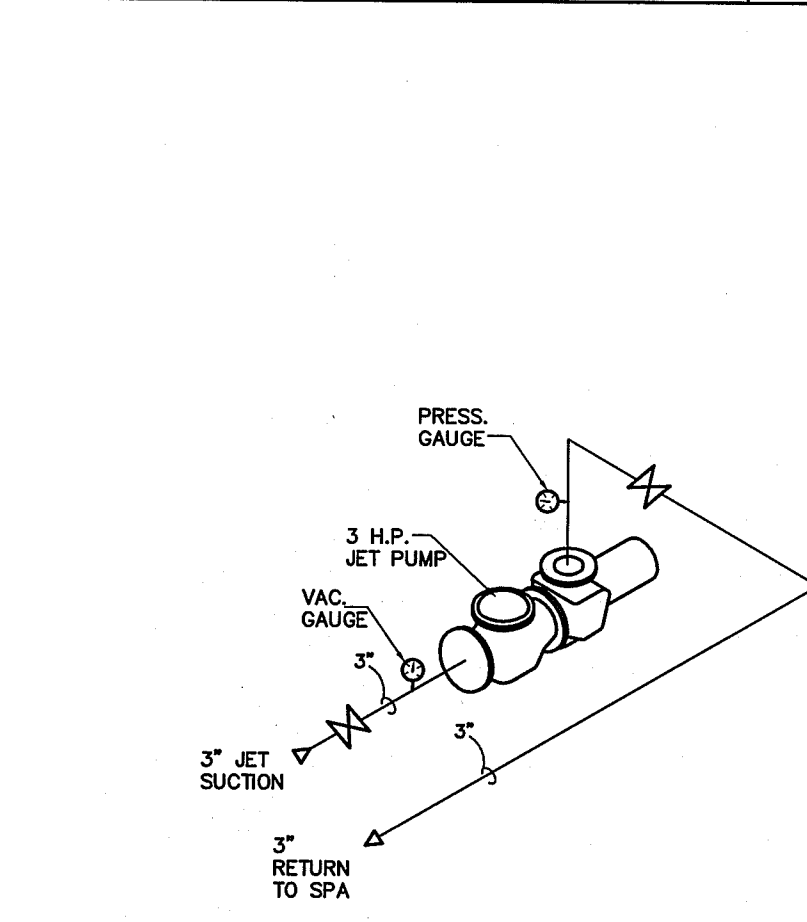






**POOL HYDRAULIC DATA**

AREA	1106 SQ. FT.
PERIMETER	137'-2" LNFT
VOLUME	30,180 GAL.
TURNOVER	6.00 HRS.
FILTER AREA	7.06 SQ.FT.
RECIRC. RATE	84 GPM
APPL. RATE	11.50 GPM/SQ.FT.
BATHER LOAD	92 BATHERS



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**CONSULTANTS:**

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**PROJECT MANAGER:**



Project Number	3627
Scale	As indicated

Drawing Title  
**POOL PIPING SCHEMATIC LAYOUT AND MECHANICAL ROOM DETAILS**

Approved: Project Director

Project Title  
**RENOVATE BUILDING 69**

Location  
1400 Black Horse Hill, Coatesville, PA

Date	03-29-13
Checked	JDB
Drawn	ML

VA Project Number  
542-CSI-203

Building Number  
69

Drawing Number  
SP3

Office of Facilities Management

